L1 Effects on the Articulation of Samaritan Hebrew

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L1 EFFECTS ON THE ARTICULATION OF SAMARITAN HEBREW

by

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I would never have been able to write this thesis without the assistance of the many people who helped me along the way. First and foremost among them is Professor Tom Werner, my adviser both for this thesis and the linguistics major at Carnegie Mellon University (CMU), who committed an unbelievable amount of time to helping me realize this work. This never would have been written without him, and I owe him a great deal.

I'd also like to thank everyone who helped fund this project. Specifically, Professor Acker of the History Department, Professor Polansky of the Modern Languages Department, Professor Skinner of the Center for International Relations and Politics, and the Undergraduate Research Office, all of CMU, contributed generously. I'd like to thank Professor Scheines of the Philosophy Department at CMU in particular, who stepped in when it seemed as though I would have insufficient funding and covered the difference.

When it became clear that I would indeed be able to travel to the Middle East, it became necessary to quickly obtain Institutional Review Board approval, a process for which I had little time. Professor David Danks, head of the IRB at CMU, went well beyond what would have been expected in guiding me through the process and ensuring that it would be completed in a timely manner. Without his help, I would have arrived without being able to complete my research.

I have received a great deal of academic support in completing this project as well. Professor Mandy Simons of the CMU Philosophy Department, Professor Steven Fassberg of the Hebrew University of Jerusalem, and Professors Abraham Tal and Moshe Florentin of Tel Aviv University all took time to guide me. I would like to thank Professor David Mortensen of the University of Pittsburgh in particular, for serving as an additional reader of the first draft of this work and providing me with valuable insight into how to conduct linguistic field work.

The most exciting part of working on this thesis was in working with my informants, and so I would also like to thank the Samaritans who spent a considerable amount of time working with me and inviting me into their homes. I was overwhelmed with the welcome I received when I came to the Middle East, and will not soon forget the time I spent acquiring my data.

Finally, I would like to thank the participants of the Dietrich Undergraduate Colloquium at CMU and the Seventh Toronto Undergraduate Linguistics Conference at the University of Toronto for attending my presentations and providing me with valuable feedback.
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Introduction

In this thesis, I will discuss the effects of the linguistic divide in the Samaritan community with respect to the articulation of the liturgical language of Samaritan Hebrew.

I first encountered the Samaritans in 2010 while on my first visit to the Palestinian city of Nablus. I had been to Israel many times prior, yet as a young Jewish American, I had never before had the opportunity to travel to the Palestinian Territories. Given the prominence of the political situation, I originally set out with no other goal in mind then to learn of the effects of the ongoing Israeli-Palestinian conflict on those living in the West Bank.

Prior to that first visit, I had only ever heard of the Samaritans tangentially, and was therefore very surprised to learn of the community on Mount Gerizim. I spent only an afternoon in the Samaritan village yet learned not just how they have been affected by the conflict, but also of their history and traditions. The Samaritans left such an impression on me that, when the time came four years later to determine a topic for my undergraduate thesis, I remembered this visit, and recalling its original purpose, decided to explore yet another facet of the conflict - namely, how it has indirectly affected the linguistic heritage of the Samaritan tradition.

The modern Samaritan community survives in two groups, one in Israel and one in the Palestinian Territories. While all Samaritans share a common heritage, which includes the use of unique forms of Ancient Hebrew and Aramaic for religious purposes, Israeli Samaritans speak Modern Hebrew as their first language while Palestinian Samaritans use Palestinian Arabic.

For what is today such a small community, it is striking how much scholarship already exists relating both to the Samaritans and their linguistic tradition, not to mention scholarship relating to Semitic languages in general. However, the specific question I raise here has not previously been studied as it doesn't really contribute to the study of historical Semitic linguistics, the usual interest of those who study the Samaritan languages. Indeed, Ze'ev Ben-Hayyim (2000: 30), the Israeli linguist who completed the first comprehensive review of the Samaritan linguistic tradition, clearly states in his seminal work that he generally prefers the use of broad transcription that ignores variation between speakers and communities, as "the presenting of the precise phonetic values of these sounds is rather a matter of the Samaritan communities' vernacular...". While such a decision is perfectly appropriate for a grammar of Samaritan Hebrew, I have chosen to focus specifically on these differences.
To accomplish this task, I rely on the research that I completed over the 2013-2014 New Year in Israel and the Palestinian Territories, where I recorded Samaritans reading select words in Samaritan Hebrew. However, for my findings to mean anything, a baseline for comparison is necessary; I will therefore begin by reviewing Samaritan Hebrew phonology as it is understood broadly in the literature (section 1). Additionally, in order to distinguish what differences can be attributed to recent influence versus historical change, I will provide a linguistic history of Hebrew and Arabic (section 2) as well as a history of Samaritan Hebrew and the Samaritans (section 3). I will then conclude with a presentation of my findings, and the conclusions that can be drawn from them (section 4). For those readers who are unfamiliar with linguistic theory and terminology but who are nonetheless interested in the topic, I provide some descriptions in the body of the text in addition to basic introductory material in the appendix (P.51).

Given the focus of this thesis, it is impossible to cover every topic I touch upon in detail; I therefore refer to works throughout which the reader may use to learn more. It is my hope that this work will provide a valuable contribution to this body of work by offering a new perspective on a language and community that has already been studied intensely, and that it may prompt further study into a topic of which I have only scratched the surface.
1 - A Basic Overview of Samaritan Hebrew

This section will provide a basic overview of Samaritan Hebrew, with a focus on phonology. This information is necessary to establish a baseline with which to compare the narrow transcription data which I have collected, and will be referred to frequently throughout the remainder of this work. Note that all discussion of Samaritan Hebrew in this section relates to the language as it is currently used; historical changes will be discussed later on.

I rely on the work of Ze'ev Ben-Hayyim in this section, specifically, the English version of his seminal work "A Grammar of Samaritan Hebrew: Based on the Recitation of the Law in Comparison with the Tiberian and Other Jewish Traditions" (2000). For those who are interested in learning more about Samaritan phonology or in studying other aspects of Samaritan Hebrew, this would be the best place to start. For a more thorough review of the historical development of Samaritan grammar over time, something which I do not provide here, refer to Florentin (2005).

1.1 - GENETIC RELATIONS AND ORTHOGRAPHY

Samaritan Hebrew is an ancient Semitic language which has not been spoken as a secular language since the Second Temple Period. It shares many similarities with Ancient Hebrew - a term which I will attempt to precisely define later on - and the various Jewish traditions of that liturgical language, and in many ways can be compared to modern Semitic languages like Palestinian Arabic and Modern Hebrew. Like many Semitic languages, written Samaritan Hebrew is abjadic, meaning that consonants carry significantly more "weight" in conveying meaning, while vowels are not represented in writing.

Given the direct genetic relation to Ancient Hebrew, it should be unsurprising that Samaritan Hebrew also has 22 letters, with a one-to-one correspondence with all other Hebrew dialects. As such, I will use the Modern Hebrew alphabet in representing all Samaritan Hebrew text under analysis. However, it is important to remember that the orthographies of the languages diverge; a display of the current Samaritan Hebrew alphabet can be found in the appendix (P.52). Note that, unlike Modern Hebrew, Samaritan Hebrew does not have final letters, a feature which will be discussed in section 2.
It is worth noting briefly that the actual spelling of words in Samaritan Hebrew is extremely similar to that of Ancient Hebrew, to the extent that the Samaritan version of the Pentateuch is fully intelligible to someone versed in Samaritan orthography and capable of understanding the Jewish versions. There are a number of publications which highlight the differences between the two versions, as these are of significant interest to religious scholars; an example page representing both Jewish and Samaritan traditions in Modern Hebrew typeset can be found in the appendix (P.53) (Tsedaka & Tsedaka 1961: 1).

1.2 - PHONOLOGY

The phonology of Samaritan Hebrew is likely what sets it apart most notably from other Semitic languages in general and Hebrew in particular. Note that I will focus almost exclusively on analyzing the consonant phonemes of the language, and will only give a cursory review of the vowels. I have several reasons for doing so, which I will discuss in greater detail later.

1.2.1 - CONSONANT PHONEMES

Throughout this work, both in the case of Samaritan Hebrew as well as Modern Hebrew and Arabic, I will treat each letter of the Semitic alphabet as a separate phoneme, unless otherwise noted. This is a simplistic form of the treatment used by Ben-Hayyim and, though perhaps at times an inaccurate portrayal of Modern Hebrew due to phonemic merger, is still the most convenient and useful for the purposes of comparative analysis.

Table 1 provides the phonemic inventory of Samaritan Hebrew, and integrates the Semitic letters representing the phonemes into the chart alongside the International Phonetic Alphabet (IPA) symbols:
TABLE 1. Distribution of the phonemes of Samaritan Hebrew (Ben-Hayyim 2000: 31)

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Labiodental</th>
<th>Dental</th>
<th>Dental (velarized)</th>
<th>Post-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Uvular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop (vl.)</td>
<td>/t/</td>
<td>/t/</td>
<td>/k/</td>
<td>/q/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop (vd.)</td>
<td>/b/</td>
<td>/d/</td>
<td>/g/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal Stop</td>
<td>/m/</td>
<td>/n/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trill</td>
<td>/r/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative (vl.)</td>
<td>/ʃ/</td>
<td>/ʃ/</td>
<td></td>
<td>/ʃ/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative (vd.)</td>
<td>/z/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>/w*/h</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>/l/</td>
<td></td>
<td></td>
<td>/j/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: By convention, /w/ is a velarized bilabial approximant

Note that, while I have relied on Ben-Hayyim's analysis, I have changed his representation so as to be more in line with current linguistic terminology. I have also changed the phonetic symbols representing the sounds to be more in line with the IPA.

Also note that I have intentionally excluded four letters from the chart, namely: ו,ピンש. These letters each represented distinct phonemes historically (for more information, see section 2). However, their realization in Samaritan Hebrew is not so straightforward. Ben-Hayyim nominally treats ו and פ as distinct phonemes (a glottal stop and voiced pharyngeal fricative, respectively), while פ and פ are considered to have merged into these to a certain extent (2000: 38). While a more thorough treatment would provide a better explanation of the realization of these four letters in different contexts, I instead choose to classify them here as "gutturals," as Ben-Hayyim himself chooses to do on occasion, and exclude them from the chart above simply due to uncertainty as to where to place them (historically, and throughout Semitic language, these four letters tend to represent the four phonemes whose place of articulation is behind the uvula). The fact that these four letters can, in some cases, act as matres lectionis (for a definition, specifically pertaining to Ancient Hebrew, refer to my Biblical Hebrew notes (2014) in the appendix (P.54)) further complicates the matter. Treatment of these consonants in this way does not influence data analysis (see section 4), and is therefore appropriate for use in this work.
According to Ben-Hayyim, the letter \( \aleph \) has undergone significant change over the years, resulting in a somewhat confusing distribution in the current tradition. In addition to the typical [w], it appears as though this letter can also be realized as [b]. The processes that led to this are somewhat complex, and it appears as though the realization of the letter as [b] is not phonemic, but morphologically or lexically driven. Again, I will not attempt to narrow down the description of this letter further here, as it will not impact data analysis (2000: 33-34).

Finally, the only letter believed to exhibit consistent allophonic variation across speakers is \( \aleph \), where /l/ \( \rightarrow \) [l], [l\(^\text{IV}\)]. This is apparently a development that took place independently in Samaritan Hebrew (Ben-Hayyim 2000: 38).

### 1.2.2 - VOWELS PHONEMES

Samaritan Hebrew has five vowel phonemes, according to Ben-Hayyim: /i/, /e/, /a/, /ɒ/, and /o,u/, where the underlying form of the last is uncertain. Again, I have changed his representation of these vowels to modern IPA based on the provided description. These phonemes are realized differently depending on the environment and the care and speed of the reader, with as many as four distinctions in vowel length simultaneously affecting vowel quality (2000: 43-46).

### 1.3 - MORPHOSYNTAX

Samaritan Hebrew is very similar to Ancient Hebrew morphosyntactically. Like Hebrew, it is morphologically templatic (for a description of Semitic templatic structure, refer to 2.1.5), and recognizes the same group of seven "core" templates and several "exotic" ones, as does Ancient Hebrew (none of this should be surprising, as the texts which convey both linguistic traditions are very similar to each other). It also recognizes the same group of tenses/aspect (the difference of which I will not comment on further, as it is not pertinent to my thesis). However, there are several minor inflectional differences - for example, the conjugative endings for verbs in the perfect/past in 1\(^{st}\) and 3\(^{rd}\) singular are identically /-ti/, distinguished from the Ancient Hebrew /-ti/ and /-t/, respectively (2000: 101-103).
2 - The Semitic Languages

This section will provide a background of the Semitic languages in general and an overview of the historical influences that have contributed to their change over time. Understanding the Semitic languages as a whole is necessary for understanding how Samaritan Hebrew developed. In addition, there are many linguistic features that Samaritan Hebrew shares with other Semitic languages, and only by understanding these features broadly is it possible to track these changes as I will in section 4.

2.1 - SEMITIC LINGUISTICS AND THE GENETIC RELATION OF LANGUAGE

2.1.1 - THE EXTENT OF LINGUISTIC FAMILIAL RELATION

One of the most fundamentally important concepts in modern linguistics is that of genetic relation between languages. This idea has been nominally understood for millennia - there is no doubt that European scholars of the Middle Ages were well aware that the Romance languages, such as Spanish, French, and Italian, both developed from a common Latin source. However, the extent to which relations between languages were possible was not truly realized until the late 18th century, when scholars discovered the similarities between Greek, Latin, and Sanskrit and proposed the existence of the now commonly accepted Indo-European language family.

In the same vein, the similarities between Hebrew and Arabic are extremely obvious to anyone who is at least partially familiar with the two languages, and the concept of a Semitic language family has been accepted for a long time. However, it is commonly believed that, much like the Romance language family, the Semitic language family belongs to a broader group of languages. That group is today known as the Afroasiatic language family (or phylum, suggesting a grouping of traditional language families). For a detailed chart relating the Semitic languages to each other and the broader phylum, refer to the appendix (P.55).

A discussion of the typographical features of the phylum and the techniques used to confirm it is beyond the scope of this thesis - for more information, refer to Diakonoff (1988) or Frajzyngier and Shay (2012). However, one feature of this relational theory will help us to better understand the Semitic language family, and that is the concept of the proto-language.
2.1.2 - PROTO-LANGUAGES AND GLOTTOCHRONOLOGY

Linguistic theory has demonstrated that, just as French, Italian, and dozens more have a common source in Vulgar Latin, so too must Hebrew, Arabic, Maltese, and all the rest have a single common source (note that this does not prevent influence from other languages or language families). We generally refer to such source languages as "proto-languages" - every single language family, by definition, must have one. In some cases, these proto-languages are known, as is (effectively) the case of Latin. However, many of these languages died well before written language and recorded history, and so various techniques have been developed to reconstruct these languages based on data from all available source languages. There are also ways to combine statistical models with this reconstruction process to provide approximate dates for the point at which languages diverged from these common sources; this is, more or less, the field of glottochronology. While these methodologies have come under criticism and may provide results that are not completely reliable, they are nonetheless a useful tool in understanding language development over time; glottochronological data is therefore presented in this paper with the understanding that the values may not necessarily be fully accurate.

2.1.3 - PROTO-SEMITIC DATING

Work by Militarev (2000) provides a glottochronological overview of the Afroasiatic phylum. This work shows that the original source for the entire phylum, proto-Afroasiatic, split around the year 10,000 BCE, yielding six further proto-languages (though the inclusion of Omotic is disputed). Proto-Semitic, one of these six, developed over the course of several millennia, and is confirmed to have itself split around the year 4,300 BCE. This is the point at which the Semitic language family was born, and the intervening 6,000 years have left ample time for linguistic change and language death. Additional glottochronological information is provided on the aforementioned chart, found in the appendix (P.55). It will be beneficial to refer back to this chart over the course of this section, so as to have a better understanding of how these various languages are related and how they have influenced each other's development.
2.1.4 - SEMITIC CONSONANT PHONOLOGY

While there is disagreement regarding the phonological nature of proto-Semitic, there are many generalizations that can be drawn from the source languages and that will assist us in better understanding the family. For additional information, refer to either Hetzron (1997) or Frajzyngier and Shay (2012: 153-159).

It is believed that proto-Semitic had a total of 29 consonant phonemes. The approximate inventory in Table 2 below is disputed, but is realistically as close as possible given that it is a reconstruction. Again, some terminology has been changed:

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Interdental</th>
<th>Dental</th>
<th>Palatal</th>
<th>Velar</th>
<th>Pharyngeal</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop (vl.)</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td></td>
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<td></td>
<td>?</td>
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<tr>
<td>Stop (vd.)</td>
<td>b</td>
<td>d</td>
<td>g</td>
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<tr>
<td>Stop (em.)</td>
<td>t’</td>
<td>k’</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Nasal Stop</td>
<td>m</td>
<td>n</td>
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<td></td>
<td></td>
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<tr>
<td>Trill</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fricative (vl.)</td>
<td>θ</td>
<td>s</td>
<td>ç</td>
<td>x</td>
<td>h</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Fricative (vd.)</td>
<td>δ</td>
<td>z</td>
<td>γ</td>
<td>ç’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative (em.)</td>
<td>θ’</td>
<td>s’</td>
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<tr>
<td>Lateral</td>
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<td>Fricative (vl.)</td>
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<tr>
<td>Fricative (em.)</td>
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<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>w*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>j</td>
</tr>
<tr>
<td>Lateral</td>
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<td></td>
<td></td>
<td>l</td>
</tr>
</tbody>
</table>

**TABLE 2. Distribution of the phonemes of proto-Semitic (Frajzyngier & Shay 2012:153)**

*Note: By convention, /w/ is a velarized bilabial approximant*
One historical feature of the Semitic languages that likely goes all the way back to the protolanguage is the existence of a class of sounds known as the "emphatics," seen above. These were (and are, in modern languages) a class of sounds which each had a non-emphatic voiceless counterpart. While these sounds have, generally speaking, patterned together in all Semitic languages, different modern languages realize them differently, and so it is impossible to ascertain exactly what their character was in proto-Semitic. In most Arabic dialects, they usually have a secondary articulatory feature of pharyngealization (Frajzyngier & Shay 2012: 153).

An unusual feature of proto-Semitic is the presence of pharyngeals in its phonemic inventory. These sounds are very uncommon and were not retained in many Semitic languages, with the notable exception of Arabic.

Another uncommon set of phonemes that are believed to have been present in proto-Semitic are the voiceless and emphatic lateral fricatives /ɬ/ and /ɬ'/. Again, these sounds seem to be less preferred in natural language, and were lost in virtually all descendant languages. The manner in which they were lost in Hebrew is discussed in greater detail below.

2.1.5 - OTHER FEATURES OF SEMITIC LINGUISTICS

Although it has relatively little bearing on the data collected, I will provide a very brief description of some other common features of Semitic languages.

Proto-Semitic is believed to have had a canonical three-vowel inventory, with an additional length distinction; that is to say, it had the phonemes /i/, /a/, /u/, /iː/, /aː/, /uː/. It also had two diphthong phonemes: /aj/ and /aw/. Some languages retained this basic inventory, while others changed it significantly (Frajzyngier & Shay 2012: 160).

All Semitic languages have a two-way distinction for grammatical gender, in which all nouns, animate and inanimate, are assigned one or the other, seemingly arbitrarily (Frajzyngier & Shay 2012: 168). In at least a few cases, a single noun can have variable gender, though this is rare (Lambdin 1971: 4). Many of the older Semitic languages also originally had a three-way distinction for number, including singular, dual, and plural, though this has been lost in many, with only vestiges of this original feature present (Hetzron 1997: 152).

Semitic languages are consistently templatic in nature, and are indeed the only language family in the world to exhibit such characteristics as robustly. Semitic templatic morphology is
characterized by a root/template system, through which all verbs (and many nouns) are constructed. Each template is a collection of consonant/vowel series (one for every person of every tense), with empty spaces into which roots are inserted. In this structure, roots only carry partial meaning, while the templates carry the rest. For a more thorough description of the templatic structure, specifically with reference to Ancient Hebrew, refer to my Biblical Hebrew class notes (2014); I have included the pertinent pages in the appendix (P.56, P.57).

2.2 - A HISTORY OF SEMITIC SPEAKERS AND LANGUAGE CHANGE

Now that we have a basic understanding of the features of proto-Semitic, we can begin to understand how the various languages have changed. In order to do this, it is necessary to study both those who have spoken them and those who influenced their development. This subsection will provide a brief history of these communities, starting in Mesopotamia at the beginnings of recorded history and working through to the present day, tracking language change and the development of Semitic writing systems throughout. Note that this overview presents a fairly traditional view for the purposes of illuminating the linguistic discussion, and is therefore more limited than a traditional historical text may be.

Refer to the Afroasiatic phylum chart in the appendix (P.55) for a graphical representation of orthographic development. Also refer to the appendix for a map demonstrating historical political presences throughout the region (P.58) (Fromkin et al. 2002: 32). For a somewhat more thorough treatment of the development of the Semitic writing system, refer to the second chapter of Hetzron (1997: 16-44). For more information on the Israelite kingdoms, see Asimov (1971), and for more on all other periods of history, refer to Fromkin et al. (2002).

2.2.1 - ANCIENT CIVILIZATIONS AND THE DEVELOPMENT OF WRITTEN LANGUAGE

The modern civilizations of Europe and the Middle East descend from the ancient ones established in the region known as the Fertile Crescent, a large region of land including and connecting the areas surrounding the Nile, Tigris, and Euphrates Rivers and encompassing modern day Iraq, Syria, Israel, and Egypt, among others. It took thousands of years for
agricultural settlements to become fully established and thousands more before these settlements began to combine into unified groups.

Among the first of these civilizations was Egypt. Despite the proximity of Egypt to the region where Semitic languages came to be spoken and the many biblical stories which involve it, this civilization played a minimal role in the development of the Semitic languages. While I must recognize that Egyptian (which, as an Afroasiatic language, is itself a distant relative) did influence Ancient Hebrew, its role was not as significant as many other languages in the region, and so is outside of the scope of this thesis.

Another civilization to play a significant role in the region was Sumer. By 3,100 B.C.E., the Sumerians, based out of their capital city of Ur, were the major power in Mesopotamia. The Sumerians themselves spoke a language that is believed to be a language isolate, or a language with no relatives. They are remembered, among other things, for having independently developed a writing system, one of only three known cases in history where this has occurred (Hetzron 1997: 17).

In about 2,300 B.C.E., King Sargon of the Akkadians, a Semitic speaking people, led an invasion of Sumer, and incorporated it into the Akkadian Empire. It was during this time that the Sumerian writing system was adapted for Akkadian (an East Semitic language removed from the West Semitic languages of Hebrew and Arabic), which, while ill-equipped to render this typologically distinct language, was altered dramatically over hundreds of years to accommodate it (Hetzron 1997: 18). Eventually, this writing system changed into an abugida, or a system in which every possible syllable combination has its own symbol.

Both Akkadian and the writing system adapted to it soon came into use throughout the region. During this period, the Indo-European Hittites began to enter the region from Anatolia; it was yet again an encounter with such a phonologically different language that prompted orthographic development. Archaeological discoveries in the ancient city of Ugarit, where a West Semitic language closely related to Hebrew was spoken, reveal the very beginnings of an abjadic writing system. This system was clearly altered to be able to represent the alternate syllable structure of Hittite, but also made the new alphabet more suitable for the Semitic templatic structure than the older system had been. Two writing systems were used in this region: a left-to-right system used in Ugarit, and a right-to-left twenty-two letter system outside of the city (Hetzron 1997: 19-20).
The new alphabet continued to spread, and was eventually adapted by the Phoenicians, a maritime Semitic culture who were based in modern-day Lebanon but who had colonies throughout the Mediterranean region. It was almost certainly the Phoenician abjad which inspired the Greek alphabet. In addition to inspiring the Greeks, the Phoenician abjad was adapted by the early speakers of Hebrew.

2.2.2 - THE RISE AND FALL OF THE ISRAELITE KINGDOMS

As the Indo-European Hittites grew in power, they began to threaten other regional powers. This resulted in a major conflict with Egypt, which started around 1,300 B.C.E. The war lasted many years and eventually ended in a peace treaty dividing what was then known as the Land of Canaan into general dominion between the two powers. However, both kingdoms were severely weakened by the conflict; Egypt began to fall into disarray while the Hittites were slowly overwhelmed by the newest power in the region, the Assyrians.

It was around this time that the biblical story of Exodus is believed to have taken place, although there is very limited historical evidence for the departure of the Israelites from Egypt. Historical evidence for the biblical narrative is known only from around 1,250 B.C.E., at which point the Israelites, a group of Hebrew speaking tribes with roots in Mesopotamia (demonstrated both by their Northwestern Semitic language and by the biblical claim that Abraham came from Ur, the old Sumerian capital), began to conquer what became known as the Land of Israel, taking it from the regional powers of Ammon, Moab, and Edom, closely related Semitic peoples, as well as what was left of the Egyptians in the region (Asimov 1971: 39-40). This period of time is addressed in the books of Joshua and Judges in the bible.

It was not until about 1,000 B.C.E. that the Israelites established themselves as a relatively dominant power in the region, when David defeated the Philistines, a powerful group based in five cities (including Gaza and Ashkelon) on the Mediterranean Coast. His son Solomon succeeded him, establishing the Israelites as an even more powerful force in the region than Egypt and Assyria. However, this status was not to last, as an internal power struggle involving Solomon's heirs led to the split of the original Israelite kingdom in two: Judah in the south, based in Jerusalem, and Israel in the north, based first in Shechem (modern-day Nablus) and later in Samaria (Asimov 1971: 68-90). By this time, it is believed that multiple dialects (or traditions)
of Hebrew were employed throughout the region - indeed, evidence of dialectal variation exists in the Bible (Fassberg 2014).

While the two kingdoms managed to survive for several centuries, in periodic conflict with each other and the other weaker nations surrounding them, they were ultimately conquered. In 738 B.C.E., the militarily dominant Assyrian Empire conquered all the eastern Mediterranean states, allowing them to maintain self-rule in exchange for substantial tribute. Significant civil unrest resulted from this economic hardship, and the Kingdom of Israel united with the Arameans, based in Damascus, to revolt against the Assyrian Empire. However, when asked to join the revolt, the king of Judah refused, fearing total destruction and encouraged to remain neutral by the prophet Isaiah. Israel and the Arameans invaded in response, and the Kingdom of Judah was reduced to essentially the territory surrounding Jerusalem before it actually appealed to the Assyrians for assistance. In response, the Assyrians entered the region in force and, between 732-722 B.C.E., completely destroyed Israel and the Arameans and fully reduced Judah to the status of a vassal state (Asimov 1971: 91-118).

A newly introduced technique utilized by the Assyrians, and possible given their tremendous size, was the forced relocation of large groups of the native population of lands which they conquered (Asimov 1971: 119). This proved to be extremely effective in reducing civil strife after conquering a territory. The Arameans and the Hebrews of Israel were not excluded from this practice.

In the case of the Arameans, this forced relocation resulted in the scattering not only of them, but their language throughout the region. Like Hebrew, the Aramean language, a relative of Hebrew known as Aramaic, employed a twenty-two letter alphabet with a one-to-one correspondence with Hebrew. Because it was so much easier to write than the cuneiform Assyrian, Aramaic went on to become the lingua franca of the entire Assyrian domain for over 1,000 years, even long after the Assyrian Empire was vanquished (Hetzron 1997: 114).

In the case of Israel, it is uncertain what happened to these communities. While it is unlikely that every Hebrew speaker was removed from the region, so many were as to constitute the complete destruction of the identity of the northern kingdom. As Israel was composed of ten of the twelve tribes of Israel, biblical and religious narratives often refer to those removed as the Ten Lost Tribes of Israel, never to return (Asimov 1971: 119). There are several communities throughout the region who are argued to be related to these exiled Hebrews; we will address one
such group, the Samaritans, in the next section. Note that, in addition to removal of the population, large groups from other conquered regions were also imported; at least at some points, natives of what is today Iraq, known as Cuthites, were resettled in what was Israel, and later Judah (Anderson & Giles 2002: 14).

Judah survived as a vassal state of the Assyrian Empire for some time, despite a single failed rebellion. Eventually, though, the Assyrian Empire fell to the Chaldeans (successors to the Babylonians), and Judah, egged on by a period of growth, came into conflict with them. King Nebuchadnezzar attacked Jerusalem in 587 B.C.E., razing the Temple of Solomon to the ground and exiling a large proportion of the population, much as the Assyrians had done to Israel (Asimov 1971: 134).

2.2.3 - THE BABYLONIAN EXILE AND THE CONSTRUCTION OF THE SECOND TEMPLE

This period of time is commonly referred to as the Babylonian Exile. Despite removal from their land and the destruction of the center of their religion, the Judeans nonetheless retained their religious identity, helped along by a surprising amount of religious tolerance from the king who had just exiled them (Asimov 1971: 137). During this time, the exiled Judeans apparently began to adopt the dominant language of Aramaic as their spoken language, while Hebrew took on a more liturgical nature (Hetzron 1997: 20). At this point, Hebrew slowly began to die as a spoken language, though it continued to be employed for religious scholarship for some time, and did see some discrete language change. When I refer to Ancient Hebrew, therefore, I am broadly referring to the Hebrew used from around the time of David until the Babylonian Exile. Though significant change no doubt occurred in the intervening time, such a simplification will serve the purpose of this thesis.

By the time spoken Hebrew began the process of dying out among the Jewish communities, it had undergone a number of changes that made it distinct both from proto-Semitic and other Semitic languages of the time. The most notable phonological feature, and one that has to an extent been retained in Modern Hebrew to this day, is the existence of stop/fricative allophony for certain letters. Specifically, six letters followed the original pattern: /stop/ -> [fricative]/Vowel_; [stop]/elsewhere (Hetzron 1997: 147).
Additionally, because the original Phoenician alphabet had only 22 letters yet proto-Semitic had 29 phonemes, several phonemes were lost by merger. Among these phonemes were the lateral fricatives; the only letter which has retained a two-phoneme character, as evidenced by words which are orthographically identical but which form minimal pairs, is פ. In Modern Hebrew, this letter is realized as either /s/ or /ʃ/, depending on the word (Hetzron 1997: 148).

The exiled Judeans also adopted the Aramaic alphabet, which, given its one-to-one correspondence to the Hebrew, was a fairly easy change to make. The Aramaic alphabet and the Hebrew alphabet came from the same Phoenician source; however, as Aramaic was used as a lingua franca throughout the region and had no religious significance, users of the language developed a written script form which Hebrew, a religious language, had resisted. This shorthand nature can be seen in the development of final letters, for example, in which certain letters of the Semitic abjad would take on a separate form when ending a word (Hetzron 1997: 20). This Aramaic alphabet, not the original Hebrew one, is the writing system employed for writing Hebrew even to this day - few changes took place after its adoption, as it soon came to be given religious significance itself.

The exiled Judeans lived primarily in Mesopotamia for decades, until Cyrus united the Persians and conquered the Chaldeans in 538 B.C.E. As the Jews (as the exiled Judeans came to be considered by historians during this period) had offered vocal support for the Persian conquest, Cyrus in turn permitted them to return to Jerusalem and rebuild the temple. Many returned, yet many more remained, establishing the first and one of the longest living Jewish communities in exile (Asimov 1971: 143-145).

The renewed Jewish presence, however, was very weak, and was surrounded by old adversaries on all sides - the only reason why it was not yet again wiped out was due to the overarching dominion of the Persians. It was Ezra who solidified the newfound Jewish identity, lending it more of a religious identity than a nationalistic one, as it had originally had. In particular, he codified the contents of the Tanach (referred to by Christians as the Old Testament) and strictly prohibited intermarriage. With the additional assistance of Nehemiah, a Jew with political influence in Persia, the Jews fortified their position in Jerusalem and were eventually permitted to rebuild the Temple (Asimov 1971: 145-146).
2.2.4 - ROME AND THE LOSS OF JERUSALEM

The historical narrative after this time becomes significantly less important with regards to this thesis. Ancient Hebrew, while still spoken to a minimum, was nearing the end of its life as anything other than a liturgical language. Meanwhile, the stage has been set for a detailed discussion of the Samaritans, to come in section 3. In short, Judea was transferred several times over the coming centuries. After the Persians, it first went to Alexander the Great and his immediate successor the Seleucid Empire, and then enjoyed a short period of Jewish independence under the Hasmoneans (this is where the story of Hannukah comes from). This ended in a civil war in 67 B.C.E., where, after one side requested the assistance of the Arabian Nabateans (known for the ruins of their capital at Petra), the other invited Rome into the region (Asimov 1971: 248).

With the end of self-rule once more, many extremist religious sects began to appear in the region, heralding once again the arrival of a Messiah, a concept first established during the Babylonian Exile. It was into this environment that Jesus was born; his story is sufficiently widely known that it will not be reproduced here. However, it is important to note that it was this Messianic fervor, along with general discontent with Roman rule, which prompted a continuous rebellious attitude. These rebellions grew worse and worse, until, in 70 C.E., the Romans, tired of the situation, conquered Jerusalem and destroyed the Second Temple (Asimov 1971: 273-274). When the Romans decided to construct a new city over the ruins of Jerusalem sixty years later, to be known as Aelia Capitolina, the Jews yet again engaged in open rebellion under Shimon Bar-Kochba in 131 C.E (Asimov 1971: 277-278).

Though initially successful, the Romans ultimately put an end to the revolt. The Romans were far more brutal than all the preceding conquerors, and by the time Bar-Kochba was killed in 135 C.E., very few people, let alone Jews, were left alive in the hills of Judea. While small Jewish communities continued to exist in the region for the next 17 centuries, and many more were established all over the world as part of the Jewish Diaspora, Jewish dominance in both the Land of Israel and in Jerusalem had come to an end (Asimov 1971: 278).
2.2.5 - THE RISE OF ISLAM AND ARABIC

Recall that the alphabet adapted by the Jews while in exile in Babylon was in fact the Aramaic alphabet of the time, and that changes in it from the original Phoenician alphabet had resulted from a slow process of adapting the orthography to faster writing speeds. While the Jews allowed for no change in what became the new method for representing a sacred language, other Semitic peoples in the region continued the aforementioned process.

As (disputably) a South Semitic language that was more indirectly related to Hebrew and that had not adapted the Phoenician alphabet earlier on, Arabic had retained many of the sounds that had been relegated to the status of conditioned allophones in Hebrew. By the time Arabic adopted the (at the time) current Aramaic alphabet used by the Nabateans, the alphabet was in disarray - the script had become so hurried such that the letters were nearly indistinguishable from each other. This problem was solved by adding dots to various letters, and adding a few new ones to represent Arabic phonemes no longer present in the Northwestern Aramaic (Hetzron 1997: 22-23). This resulted (with several additional modifications) in the Arabic script used at the time of Muhammad.

Muhammad was born in Mecca, an Arabian city, in 570 C.E. By the time he was born, some Arabs had adopted either Judaism or Christianity as a religion, yet most still observed local polytheistic religions. Muhammad began to spread the message of a single God, as told by earlier prophets, including Abraham and Jesus. This message was not accepted in his home of Mecca, and so Muhammad established the city of Medina as a base for the followers of his message. Fairly quickly, the Muslims, as they came to be called, conquered the other Arab tribes and spread Islam throughout Arabia (Fromkin et al. 2002: 64-66).

With the establishment of Islam in Arabia and of the Quran, an Arabic document, as its sacred book, Arabic took on the role both of a liturgical language as well as a spoken one. It travelled with the Muslims as they first ventured out into what had once been known as Judea and was now called Palestine, where they defeated the forces of the Byzantines, the new rulers of the region. The Muslims proved to be unstoppable, and, in less than 200 years, the Islamic Caliphate spread from modern-day Pakistan in the east all the way to Iberia (Fromkin et al. 2002: 66-72). Although new non-Arab rulers came and went, Islam remained the dominant religion in the region (under the Ottomans, for example), and Arabic the dominant language.
The language of the Quran is classified as Classical Arabic, and it is this language that spread so quickly throughout the Middle East with the Muslim conquerors. However, because so many non-native speakers of Arabic came to learn Arabic over such a short period of time, and because the expanse of the Caliphate was so great, many dialectal variations began to emerge in the language. These variations have amplified dramatically with time and the influence of even more languages (French in Morocco, for example), leading today to a collection of dialects that are so different that they are sometimes considered distinct languages (Hetzron 1997: 263).

Palestinian Arabic refers to the form of Arabic spoken by Palestinians in the Palestinian Territories (the West Bank and Gaza), Israel, and refugee camps in Lebanon, Jordan, and Syria, and is considered a subdialect of Levantine Arabic. Unfortunately, the term is not exactly ideal: significant differences exist in the Arabic spoken by different Palestinians, even those living within mere kilometers of each other, while Jordanian Arabic (many speakers of which descend from Palestinian refugees of the 1948 and 1967 Arab-Israeli wars) is oftentimes more similar to the Arabic spoken in the West Bank than Gazan Arabic is. As such, I will not attempt to provide a linguistic description of Palestinian Arabic here, and elect instead to defer the relevant discussion to section 4. However, I do want to discuss a small number of phonological features common to either Arabic in general or Palestinian Arabic in particular which resulted from language change from proto-Semitic and which distinguish it from other Semitic languages.

Perhaps the best known example of language change in Arabic is the loss of the /p/ phoneme, which was replaced by /f/. In addition to this change, the emphatic /k'/ of proto-Semitic shifted slowly to /q/ in Classical Arabic, and has been retained in some, though not all variations of Palestinian Arabic. /g/ was lost, and is realized as a postalveolar in most dialects, while the fricative inventory reduced somewhat through merger. Finally, and importantly, most Arabic dialects, including the Palestinian variety, have retained the Semitic pharyngeals (Frajzyngier & Shay 2012: 155-156).

2.2.6 - THE JEWISH EXILE, ZIONISM, AND MODERN HEBREW

While the Arabs were conquering Palestine, and indeed for a long time thereafter, the Jews were in a state of what has been come to be known as the Jewish Diaspora. Jewish communities spread throughout the known world, establishing themselves in the territories of the
Roman Empire and beyond. Early on, many Jews integrated into the Caliphate, guaranteed a protected status that made them, if not equals, at least more respected (and safer) than their counterparts in Europe (Fromkin et al. 2002: 73-74).

While many smaller communities existed, the two main communities came to be known as the Ashkenazi and the Sephardi. The Ashkenazi, from the Hebrew word Ashkenaz (which, over time, was a term that came to be applied to the areas of modern-day western Germany and eastern France), started as a community in west-central Europe, but over the centuries moved slowly east, until the majority of the community was centered in and around Poland. At some point, a large proportion of this community adopted an medieval German dialect; with the addition of Hebrew words and the adoption of the Aramaic alphabet for representation of the language, the community slowly developed Yiddish as a distinct and defining language (Schweitzer 1971: 81-83, 147-148, 299; König & Van Der 2002).

At the other end of Europe, the Sephardi community (the term originates from Sepharad, the Hebrew word for Spain) developed in the Iberian Peninsula. The arrival of the Muslims in the area was generally beneficial for the Jews, but that period did not last; the Christians succeeded in retaking modern-day Spain and Portugal through what is known as the Reconquista. While the lives of the Iberian Jews remained relatively good for a short while, increasing influence from the Catholic Church in the region resulted in a decree of expulsion being issued against Jews throughout the region only a few years after the discovery of the Americas - the only way to avoid another exile or death was through conversion. Many Jews did indeed convert, yet many more left, moving to Muslim dominated territory in North Africa and the Middle East. With them, they took the language they had developed while living among the Spanish, a Jewish inflected Spanish which, like Yiddish, is written using the Aramaic alphabet (Schweitzer 1971: 102-107, 299).

With the American and French Revolutions of the 18th century, a new ideology began to spread throughout Europe. Nationalism had been born, and it altered Jewish thought in a way no other phenomenon had since the destruction of Jerusalem in 70 C.E. (Hoffman 2004: 188). I will forego a discussion of the birth and development of Zionism (secular Jewish nationalism) in favor of a brief discussion of the linguist who, in many ways, made the entire venture successful.

Eliezer Yitzhak Perelman, who came to be known as Eliezer Ben-Yehuda, was born in Lithuania in 1858, and exhibited tremendous linguistic skill from a young age. Though his
formative education had been mostly religious, he soon pursued more secular studies, and became committed to the development of a spoken Hebrew language as a unifying force for the Jewish communities of the world. He received minimal support for this concept from the Zionists in Europe and ultimately moved to Palestine in 1881, continuing his linguistic development and activism. His son, born in 1882, was the first native Hebrew speaker in nearly two millennia (Hoffman 2004: 187-189).

Ben-Yehuda's work paid off - with the development of a new lexicon with which to represent modern secular concepts and a simplification of the Sephardi tradition of Hebrew phonology, more and more Jews decided to adopt the language. Only 32 years after the birth of the first native Hebrew speaker, the predecessor to the Technion in Haifa made the decision (despite vocal protest) to begin teaching its classes in Hebrew, rather than German. With the end of the Ottoman Empire and the establishment of the British Mandate in 1919, the use of Hebrew accelerated, and it soon became the dominant language in the new Jewish city of Tel Aviv (Hoffman 2004: 191).

While the prescriptive mandates issued regarding early Modern Hebrew were surprisingly successful, the linguistic development of the language was soon out of control of any one individual. With the continuous waves of immigration that resulted first from the birth of Zionism, and later from the end of the Holocaust and the expulsions of Jewish Arabs after the establishment of the State of Israel, the language was subjected to tremendous influence (Hoffman 2004: 193). Even today, a large minority of Jewish Israelis (not to mention the roughly 20% of Israelis who identify ethnically as Palestinian and speak Arabic as their first language) speak Hebrew only as a second language.

As with Arabic, I will not provide a thorough account of Modern Hebrew phonology here; that will be provided alongside the Samaritan data. However, I will discuss several features of Modern Hebrew that distinguish it from both proto-Semitic and Ancient Hebrew.

The rhotic in MH is highly variable. As per what used to be official pronunciation rules and following in the Sephardic (and indeed, Semitic) tradition, it is articulated as /r/. However, with the exception of Arabicized Hebrew, the generally accepted pronunciation today is the Ashkenazi /ʁ/, although many others exist (Hetzron 1997: 314); North American speakers often have difficulty not articulating /ɹ/.
Many stereotypically Semitic phonemes have undergone a process which may be called merger. The emphatic consonants, traditionally /q/ (originally /k'/), /t'/, and /s'/, are now articulated as /k/, /t/, and /s/; as such, there are two letters that represent each of these sounds. I consider them distinct phonemes for the purposes of this thesis, however, because the letters themselves are still distinctive and are readily understood to be so by native speakers. Additionally, the pharyngeal consonants have been lost; /ħ/ and /ʕ/ are now /χ/ and /ʔ/ (or else null), respectively. As with the rhotic, these distinctions are still sometimes maintained in Arabicized speech (Hetzron 1997: 314).

MH maintains the historical stop/fricative allophony of Ancient Hebrew that was previously discussed; however, only three of these six variations are still recognized. The interdentals have been lost, along with the voiced velar fricative, and so the only traditional allophonic pairs are /b/-/> [b], [v]; /k/-/> [k], [χ]; and /p/-/> [p], [f] (Hoffman 2004: 204). MH, like Ancient Hebrew, still uses the letter ש to represent what I consider to be two distinct phonemes.
3 - Who Are the Samaritans?

If you were to ask the average person what the term "Samaritan" means, the answer they give you (assuming they have one) is likely to be similar to definition #2 below, taken from the online version of the Merriam-Webster English Dictionary:

"1: A native or inhabitant of Samaria
2: [from the parable of the Good Samaritan in Luke 10:30–37] a person who is generous in helping those in distress"

For now, disregard the first definition provided (it is at best incomplete, and at worst inaccurate). The second definition is consistent with most modern usage - for example, if your car were disabled and someone with whom you were not acquainted stopped to help you, you might describe that person as a "Good Samaritan". But to better understand the meaning of the term, it's instructive to look at the source. Below is the full text of the parable of the Good Samaritan in the Christian Gospel of Luke, using a modified New International Version translation adapted for the sake of clarity:

"25 On one occasion an expert in the law stood up to test Jesus. 'Teacher,' the lawyer asked, 'what must I do to inherit eternal life?' 26 'What is written in the Law?' Jesus replied. 'How do you read it?' 27 The lawyer answered: ' "Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind"; and, "Love your neighbor as yourself." ' 28 'You have answered correctly,' Jesus replied. 'Do this and you will live.' 29 But the lawyer wanted to justify himself, so he asked Jesus, 'And who is my neighbor?' 30 In reply Jesus said: 'A man was going down from Jerusalem to Jericho, when he fell into the hands of robbers. They stripped him of his clothes, beat him and went away, leaving him half dead. 31 A priest happened to be going down the same road, and when he saw the man, he passed by on the other side. 32 So too, a Levite, when he came to the place and saw him, passed by on the other side. 33 But a Samaritan, as he traveled, came where the man was; and when he saw him, he took pity on him. 34 He went to him and bandaged his wounds, pouring on oil and wine. Then
he put the man on his own donkey, took him to an inn and took care of him. 35 The next day he took out two silver coins and gave them to the innkeeper. "Look after him," he said, "and when I return, I will reimburse you for any extra expense you may have." 36 Which of these three do you think was a neighbor to the man who fell into the hands of robbers? 37 The expert in the law replied, 'The one who had mercy on him.' Jesus told him, 'Go and do likewise.' "

You can see from the story how the concept of the Good Samaritan came about. But what does Samaritan itself mean? Furthermore, why was it integral to the story to mention the background of the man, and to contrast it so pointedly with the respectable professions of the two who passed by the injured man without providing assistance? And finally, why was the lawyer averse to identifying the "neighbor" in the parable by name?

These questions will serve as a guide in understanding exactly who the Samaritans are and how the form of Hebrew they use for religious purposes has come to be so different from that of the various Jewish traditions. For even more information on this topic, especially with regards to origin and history, refer to Anderson and Giles (2002).

3.1 - ORIGINS

The actual origins of the Samaritans are uncertain - indeed, even the real meaning of their name is contested. The Hebrew word for "Samaritans", שומרונים, (Modern Hebrew - [ʃomǝrɔnim]) has two possible sources. The first, as is attested in the dictionary definition above, is that it comes from the Hebrew word for the city of Samaria, שמיorea, (Modern Hebrew - [ʃomǝro], the constructed capital of the Kingdom of Israel (refer to section 2 for more information) - the city later lent its name to the region surrounding it. Many sources, including Anderson and Giles (2002), provide evidence that this name once applied to all the inhabitants of the region, but that it came to be associated with the religious community from Mount Gerizim over time.

However, other sources, including the Samaritans themselves, provide an alternate meaning. Specifically, they argue that the term is derived from the Hebrew root ש.מ.ר, which relates to guarding or keeping. As such, according to this approach, an accurate translation for "Samaritan" would be "Keeper"; this is in line with Samaritan tradition, as they believe that they
are the true Jews, the only ones who have kept the original laws, given to Moses, over the generations (Tsedaka 2014).

The true origins of the Samaritans are even more contested than the source of their name. Recent genetic and archaeological evidence has suggested a certain amount of truth to both traditions described below (although the totality of the Jewish tradition is under doubt), in addition to even more possible contributing sources which will not be discussed here. Ultimately, both traditions claim a split in the priesthood as the source for the two distinct communities of Samaritans and Jews (Anderson & Giles 2002: 10-19).

3.1.1 - THE SAMARITAN TRADITION

The Samaritans see themselves as the direct continuation of ancient Judaism, descending directly from the Israelites who escaped from Egypt in the story of Exodus. According to Samaritan tradition, the original Israelite religious center had been in Shechem, the city whose ruins were used as the base for the modern-day Palestinian city of Nablus (from the Latin Neapolis, the name of the city when the Romans controlled the region) (Anderson & Giles 2002: 12). The Jewish tradition suggests the same to be true; according to the Tanach, it was in Shechem that the tribes, under Joshua, had affirmed their commitment to God after conquering the Land of Israel (but well before the historical narrative, discussed in section 2, begins).

However, the judge Eli established another site at Shiloh, shifting prominence away from what was, according to the Samaritans, the true religious center of the Jews. As per the Samaritan origin story, this establishment of Shiloh as a main religious site resulted from a disagreement between Eli and the high priest. As such, the Samaritans claim to be directly descended from the Jews who remained in Shechem, on Mount Gerizim, while the Jews are those who followed Eli (Anderson & Giles 2002: 10-19). David later conquered Jerusalem and Solomon constructed the Temple there, enshrining the city as the holiest and most important location in all of Judaism; this finalized the ideological schism between the Samaritans and the Jews, with the central difference being identified as Samaritan allegiance to Shechem, contrasted with Jewish allegiance to Jerusalem (Tsedaka 2014).
3.1.2 - THE JEWISH TRADITION

The Jewish tradition claims that the Samaritan community resulted from a much later event than the one described above. Recall from section 2 that the Kingdom of Israel was destroyed by the Assyrian Empire well before the Kingdom of Judah was finally lost. Also recall that population deportation was a tool used by the empires of this time to control conquered areas; as such, many Israelis in the northern kingdom were deported (again, according to Jewish tradition, these are the lost tribes), and foreigners were brought in in their place. Many of the foreigners who were brought to the Samaria region were described as being from a region in modern-day Iraq, and are described as Cutheans. According to the Bible, specifically 2 Kings 17, these newcomers to the land came under attack from lions as a divine punishment for their unfamiliarity with the traditions of the region; they subsequently adopted a form of Judaism to appease God, although the Tanach claims that they retained polytheistic qualities of their old religions. Historically, the Jews referred to the Samaritans as "Cutheans" as a way of insulting them based on their perceived non-Jewish ancestry (Anderson & Giles 2002: 14-15).

3.2 - THE HISTORY OF THE SAMARITANS

Whatever the origin of the Samaritans, they only become visible to the historical record starting around the time the Jews begin to return to Judea after the Babylonian Exile. This section will provide a brief historical overview of the Samaritans, starting at this time and continuing to the present day. As before, I will focus especially on changes to Samaritan Hebrew over time; I am assuming, following the conclusions of previous scholarship, that Samaritan Hebrew began long ago (though at an undetermined time) as one of several Hebrew traditions (or dialects) present in the Land of Israel at the time of the two kingdoms (Fassberg 2014).

As this is the case, it is important to note that some of the differences between the Samaritan and Jewish Hebrew traditions may result from differences that were present before the two communities were officially distinct. The most notable of these is the absence of two distinct phonemes contained by the letter ψ (refer to section 2 for more information on this phenomenon in Jewish Hebrew traditions). It is likely that this merger took place in the dialect used by the
Samaritans while it had not taken place in the dialect used by the direct descendants of the Jews (although the exact source of the difference remains unconfirmed) (Ben-Hayyim 2000: 35-37).

3.2.1 - THE END OF THE BABYLONIAN EXILE

Recall from section 2 that the Jews who returned to Judea after Cyrus ended the Babylonian Exile were under tremendous difficulty in reestablishing Judaism both in the area and specifically in Jerusalem. According to Jewish tradition, it was only through the work of Ezra and Nehemiah, in codifying the exact contents of the Tanach and in particular forbidding intermarriage with any of the current inhabitants of the land (who, according to tradition at the time, could not possibly be Jewish as all Jews had been expelled by the Chaldeans), that the community managed to avoid dissolving into those of the various inhabitants of the region.

However, the effects of the absolutist views of Ezra and Nehemiah are apparent in the deterioration of relations between the Samaritans and the Jews. The Samaritans, who were dismissed by the new Jewish community as the Cutheans of the (newly canonized) Tanach, came to regard Ezra in particular with disdain; according to them, his move to not only adopt a new alphabet for the Hebrew language but also to extend sacred status to new books, in addition to the Pentateuch, was heresy. It is therefore commonly agreed that Ezra was the catalyst which finalized the split between the Samaritan and Jewish communities (Anderson & Giles 2002: 22).

3.2.2 - THE SELEUCIDS AND THE MACCABEES

Very little information regarding the Samaritans is contained in the historical record outside of the general confrontational attitude that existed between them and the Jews. A great difficulty in defining Samaritan history of this period is in separating out the actions of the Samaritan sect with those of the Samarians, because many in the region (including both the Jews and the various empires which controlled the area) tended to conflate the two. However, there are several references in 2 Maccabees to Jewish communities on Mount Gerizim, or at least communities who were treated as Jewish by the Seleucids (Anderson & Giles 2002: 28).

The first instance in which the Samaritans are truly seen to be a distinct sect historically is in their decision to not revolt again the Seleucids along with the Maccabees, a rebellion which,
from a purely historical perspective, resulted in significant persecution of all religious and cultural elements, both domestic and foreign, that were not in line with the Jerusalem-dominated branch of Judaism that has ultimately taken almost total prominence. Several years after this decision, the Maccabees, still under Seleucid control, attacked several cities north of Jerusalem, including the community on Mount Gerizim; it is believed that this attack resulted in the destruction of a temple which was likely over two centuries old. The destruction of this holy site finally solidified the general animosity felt between the Jews and the Samaritans (Anderson & Giles 2002: 29).

3.2.3 - ROME

The various instances of Samaritans in the stories of Jesus, therefore, are unsurprising in that the Samaritans were a small yet notable group in the Judean landscape at the time and also harbored mutual animosity with the dominant Jews of Jerusalem. We can now look back at our original questions regarding the story of the Good Samaritan with new understanding, seeing this story in the context of Jesus, who, while later revered by Christians as the basis for their religion, was additionally a political figure in the region at the time who had to contend with the environment in which he found himself.

As far as Rome's perception of the Samaritans, they were, depending on the time, treated either with indifference or hostility; the most notable incident from the era, documented both by Josephus and a Samaritan inscription on the site, took place around 50 C.E., when Roman soldiers besieged Mount Gerizim and killed over 10,000 inhabitants (Anderson & Giles 2002: 39). In this way, they are not very different from the many other minority groups that existed at this time.

3.2.4 - AFTER ROME

With the difference between the Samaritans and the Jews established, I will now give a very brief overview of Samaritan history, with the focus of establishing the linguistic influences on Samaritan Hebrew that differ from equivalent influences on the Jewish traditions.
Despite the complex yet generally negative feelings between the Samaritans and the Jews, the Samaritans joined in the Bar-Kochba Rebellion. While the desecration of Jerusalem with the establishment of Aelia Capitolina was in some ways the catalyst for the rebellion, this obviously didn't disturb the Samaritans as much (besides, the ruins of Shechem had been replaced with Roman Neapolis fifty years prior); rather, it was the ban on ritual circumcision, enforced by Emperor Hadrian, which coerced the Samaritans into fighting the Romans. As was the case with the Jews, the effects of this failed rebellion on the Samaritans were catastrophic (Anderson & Giles 2002: 49).

It was likely during this time that the four "guttural" letters of Samaritan Hebrew began to merge; this may be the result of influence from Aramaic, the language primarily spoken by the Samaritans at this time (indeed, much Samaritan work is written in their own form of Aramaic, or Samaritan Aramaic - this liturgical language, though pertinent to the study of the Samaritans, is outside of the scope of this thesis) (Ben-Hayyim 2000: 38). This is especially likely seeing how the pharyngeals were present in Arabic - it would have been even more unlikely had this change occurred later (the use of Arabic as the spoken language of the Samaritans is discussed below), as the presence of pharyngeals in the spoken language would have likely reinforced the presence of such sounds, as is seen in many Jewish Arab traditions of Hebrew, as well as in Arabicized Modern Hebrew.

The Samaritans did not fare much better under the Byzantines than they had under the Romans. The general oppression at the hands of the Christian Byzantines prompted many Samaritans to aid the Muslim Arabs in their conquest of Palestine. However, there was uncertainty among the Muslims as to whether or not the Samaritans would indeed qualify for the same level of protection as the Jews or Christians, and treatment of the Samaritans was relatively poor, leading to widespread religious assimilation and migration to urban centers in other areas of the Middle East (including Ashkelon, Gaza, and Damascus). Ultimately, while some of the Samaritans did remain a distinct sect, even they unsurprisingly assimilated to a degree, most notably in their adoption of Arabic as their primary language (Anderson & Giles 2002: 51-71).

It is very likely that this period is the source of the loss of the stop/fricative allophonic variation that is traditionally observed in Hebrew. Such an observation is supported especially by observing which allophones in each set were retained. In the case of five of the six letters (ג, ה, ד, ק, ת), the stop allophone was retained, while the fricative was discarded. As these were the
underlying allophones, this is not terribly surprising. However, in the case of only one letter (֪), it was the stop allophone that was lost - this letter is now realized as /f/.

Even without considering the loss of /p/, it is still likely that Arabic is the source of the loss of allophony. As it developed as part of a separate branch of the Semitic family, it did not undergo the development of stop/fricative allophony that Hebrew had. However, as discussed in section 2, a notable early feature of Arabic was its loss of the /p/ allophone, and its replacement with /f/; considering how Samaritan Hebrew exhibits the same change, it is therefore likely that Arabic influence is responsible for all changes observed above.

Additionally, note how the emphatics had not changed in Samaritan Hebrew by this time, and indeed were never lost in the tradition (as opposed to many Jewish traditions). The use of Arabic as a spoken language likely helped to reinforce the emphatic distinction.

It is commonly agreed that the Samaritan linguistic tradition changed little after the initials effects of Arabic were realized (Fassberg 2014). As such, I will disregard the intervening history, choosing to focus finally on the modern period.

3.2.5 - THE STATE OF ISRAEL

By the time the Ottoman Empire took control of the Middle East, a number of Samaritan diaspora communities were present in Egypt, Syria, and elsewhere in Palestine (including Gaza). However, with increased oppression from the Ottomans, many returned to Nablus, and still others assimilated; by the turn of the 20th century, fewer than two hundred Samaritans remained, even while interest in the Samaritans grew among Europeans and Americans (Anderson & Giles 2002: 97-102).

The establishment of the State of Israel in 1948, and the subsequent war between Israel and its Arab neighbors, placed Nablus under Jordanian control. In the 1950s, the President of Israel, Yitchak Ben-Tzvi, who, in addition to his involvement in the foundation of Israel, was also an historian with a particular interest in the Samaritans, assisted in the establishment of a Samaritan community in Holon (Tsedaka 2014). Until 1967, the community in Holon was divided from the community in Nablus, yet the 1967 Arab-Israeli War, which placed Nablus and the remainder of the Palestinian Territories under Israeli control, brought the two communities back into contact.
3.3 - THE SAMARITANS TODAY

There are only approximately 800 Samaritans left, with about half of them living in Holon and the other half in Kiryat Luza, a community just outside of Nablus that was established on Mount Gerizim shortly after the outbreak of the First Intifida (Tsedaka 2014). Israeli Samaritans are fairly well integrated into Israeli society - they speak Modern Hebrew as their first language, carry Israeli passports and, unlike Israeli Arabs, they are required to serve in the Israeli Defense Forces. The Palestinian Samaritans, meanwhile, speak Palestinian Arabic as their first language, carry Palestinian passports (though, as with all Palestinians, actual nationality is highly variable) and, given that they live outside of Nablus, are slightly removed from Palestinian society.
4 - Data Analysis

This section will present the data and results from the research I conducted. Included in this section is a description of my research methodology, a presentation of the processed data, a discussion of the pertinent observations, and overall conclusions that can be drawn to answer the original thesis question, as well as future directions by which to address it further.

4.1 - METHODOLOGY FOR DATA COLLECTION

All data discussed below were collected during the weeks surrounding the 2013-2014 New Year. Israeli Samaritan data were gathered from four informants in the Israeli city of Holon, while Palestinian Samaritan data were gathered from four informants in the Samaritan colony of Kiryat Luza, on the summit of Mount Gerizim overlooking the Palestinian city of Nablus (Shechem). Each informant was asked to read both a series of nonce words (words which follow the phonological patterns of the language but which aren't actually words) and a series of real words in all three of the languages under analysis (Samaritan Hebrew, Modern Hebrew, and Palestinian Arabic) - one Israeli Samaritan was unable to read Arabic, while one Palestinian Samaritan was unable to read Modern Hebrew, and so the corresponding data was not collected in these cases.

Additionally, data were collected from one non-Samaritan Israeli informant in the Israeli city of Tel Aviv and one non-Samaritan Palestinian informant in the Palestinian city of Nablus. Data provided by these informants were to be used as a control to confirm that all Samaritan informants articulate their first language in a similar manner to the corresponding non-Samaritans. In the case of the controls, data were collected in their first language only.

Both nonce and real words were provided in the standard orthography of the language under consideration - errors in transcribing words in Arabic have resulted in that portion of the data being excluded from the analysis. The word lists are available in the appendix (P.59, P.60).

Modern Hebrew, a language in which I was moderately proficient at the time of data collection, was used as the primary elicitation language for all Samaritan informants. Several of the Samaritan informants spoke a minimal amount of English, and so English was used at times where Modern Hebrew proved insufficient. In the case of several Palestinian Samaritans, a small
amount of Palestinian Arabic was used, a language which I speak only minimally. One Palestinian Samaritan informant was a fluent speaker of English, and so English was used in that case. In the case of the control informants, English was employed as the elicitation language.

Recordings were obtained using a Marantz PMD660 recorder equipped with a headset. Praat was used to process the recordings and generate a spectrogram through Fourier Transform using a window length of .005 seconds.

In all cases, I have endeavored to use actual words to draw my conclusions. However, given the limitations imposed both by time, available resources, and skill, it became necessary to analyze several phonemes primarily by use of nonce words (at least, in the case of word initial environment). The presented results therefore include some data for which only nonce words were used. Overall, a minimum of six sets of tokens were used for each analysis, three sets of two from each community; however, in many cases, more tokens were available and were used.

4.2 - RESULTS

4.2.1 - SAMARITAN HEBREW VOWELS

As I have mentioned previously, I focus virtually none of my data analysis on Samaritan Hebrew vowels. There are several reasons for this, provided below.

First, there is significant evidence that the vowel inventories of Samaritan Hebrew and what developed over time to become what is today Modern Hebrew have changed dramatically and over the centuries. Tracking these changes becomes especially difficult, given orthographic limitations imposed by the languages. Compare this to changes in Semitic consonant phonemes, which are far better understood - refer back to section 2 for a detailed discussion.

Additionally, the effects of Modern Hebrew and Arabic on Samaritan Hebrew would be far more difficult to correlate to pronunciation of the language, both due to the complexity of Samaritan Hebrew and its historical development, as previously discussed, and because of the inherent simplicity of Modern Hebrew and variability of Palestinian Arabic (which I will discuss in more detail later on).

Finally, vowel quality in Samaritan Hebrew is highly complex. Depending on reading speed (which I was unable to control in my data acquisition), there are as many as four distinct
vowel lengths, and even experts in the field of Semitic linguistics have been known to incorrectly interpret them, as Ben-Hayyim has noted (2000: 44). To add to the complexity, alternating vowel length may affect the realization of the vowels depending on whether the words are being read in a passage or independently.

Given all these reasons, and the inherent need to limit the scope of this work, I have decided to restrain myself to consonant phonemes only. This is not to say that vowels are not worth consideration - hopefully, they will be studied in the future.

4.2.2 - GENERAL COMMENTS

The results from my research are provided below. I have organized the data by letter, and have noted articulation in Modern Hebrew (MH), Palestinian Arabic (AR), and several forms of Samaritan Hebrew (SH - literature, Israeli, and Palestinian). For more information on the literature assignments, refer back to section 1. At the end of each entry, I have provided a line to discuss observed differences between the Samaritan Hebrew pronunciations, if any exist.

I should note that the Modern Hebrew and Palestinian Arabic articulations provided below are based on data from various chapters of "The Semitic Languages," correlated with direct observations of the controls and Samaritan L1 pronunciation (from which only one difference arose - namely, partial aspiration of word initial stops in the collected data). In no case did a speaker who claimed a first language of either Modern Hebrew or Palestinian Arabic deviate significantly from what was expected.

Unfortunately, I am forced to define "significantly" and "expected" rather loosely here; however, based on my personal experience with Modern Hebrew and Palestinian Arabic, and direct observation of the spectrograms, I do not believe Samaritan L1 articulation to be outside of the realm of free variation that is present among all L1 speakers. This is of particular concern with regards to Palestinian Arabic, as there is considerable dialectal variation even within the West Bank - for example, for many Nablusi speakers of Arabic, /q/->[ʔ]. This particular variation was not observed for any informants, though, and I am reasonably confident that, within the sample, little to no dialectal variation existed.
I do not attempt to reproduce here any of the discussion in the literature relating to the use of matres lectionis in determining vowel quantity or quality. Therefore, that information is conspicuously absent below, but would not enter into this analysis regardless.

For a list correlating the Hebrew letters to their Arabic counterparts, see the appendix (P.52). The six Semitic letters found in Arabic but absent in Hebrew were not factored into this analysis, although I did keep these aspects of Arabic phonology in mind when analyzing the collected data. I have not observed any direct influence from these "absent" phonemes.

4.2.3 - DATA

8
MH - [ʔ] (+occasional mater lectionis)
Palestinian Arabic - [ʔ] word initial, long vowel phoneme word internal (mater lectionis)
SH (literature) - "guttural"
SH (Israeli) - "guttural"
SH (Palestinian) - "guttural"
Observed differences (between Israeli and Palestinian SH) - None

9
MH - /b/-[b],[v] (extended VOT preceding word initial [b], ~ -160 ms)
Palestinian Arabic - [b] (extended VOT preceding word initial [b], ~ -90 ms)
SH (literature) - [b] (possible variation in undefined environments, including [p] and [β])
SH (Israeli) - [b] (~ -160 ms VOT); [f] for word 17
SH (Palestinian) - [b] (~ -90 ms VOT); [v] for word 17
Observed differences - VOT L1 dependent; difference for prefix

9
MH - [g] (possible mild aspiration word initial, VOT ~ -100-160 ms)
Palestinian Arabic - [ʒ]
SH (literature) - [g]
SH (Israeli) - [g] (moderate negative VOT)
SH (Palestinian) - [g] (minimal negative VOT)

Observed differences - **Only slight change in VOT between communities**

MH - [d] (possible mild aspiration word initial, VOT ~ -120 ms)
Palestinian Arabic - [d] (extended VOT preceding word initial [d], ~ -90 ms)
SH (literature) - [d] (with possible fricatization in undefined environments)
SH (Israeli) - [d] (moderate negative VOT)
SH (Palestinian) - [d] (moderate negative VOT)

Observed differences - **VOT difference possible**

MH - /h/>[h], occasionally [ʔ] word internal; mater lectionis word final
Palestinian Arabic - [h]; mater lectionis word final
SH (literature) - "guttural"
SH (Israeli) - "guttural"
SH (Palestinian) - "guttural"

Observed differences - **None**

MH - [v]; mater lectionis for [u], [o]
Palestinian Arabic - [w]; mater lectionis [u]
SH (literature) - [w]; occasionally [b]
SH (Israeli) - [w]; mater lectionis [u]
SH (Palestinian) - [w]; mater lectionis [u]

Observed differences - **None**

MH - [z]
Palestinian Arabic - [z]
SH (literature) - [z]
SH (Israeli) - [z]
SH (Palestinian) - [z]
Observed differences - None

MH - [χ]
Palestinian Arabic - [h]
SH (literature) - "guttural"
SH (Israeli) - "guttural"
SH (Palestinian) - "guttural"
Observed differences - None

MH - /t/-[t], [tʰ] syllable initial
Palestinian Arabic - [t̬]
SH (literature) - [t̪]
SH (Israeli) - /t/-[t], [tʰ] syllable initial
SH (Palestinian) - [t]
Observed differences - None - emphatics observed; aspiration influence from MH

MH - [j]; mater lectionis for [i]
Palestinian Arabic - [j]; mater lectionis for [i]
SH (literature) - [j]
SH (Israeli) - [j]; fairly complex vowel effects ([i] most common)
SH (Palestinian) - [j]; fairly complex vowel effects ([i] most common)
Observed differences - None - vowel effects consistent between all speakers

MH - /k/-[k],[x]
Palestinian Arabic - [k]
SH (literature) - [k]
SH (Israeli) - [k]
SH (Palestinian) - [k]
Observed differences - None

MH - [l]
Palestinian Arabic - [l]
SH (literature) - /l/→[ l],[ḽ]
SH (Israeli) - [l]
SH (Palestinian) - [l]
Observed differences - None; no allophonic variation observed in SH

MH - [m]
Palestinian Arabic - [m]
SH (literature) - [m]
SH (Israeli) - [m]
SH (Palestinian) - [m]
Observed differences - None

MH - [n]
Palestinian Arabic - [n]
SH (literature) - [n]
SH (Israeli) - [n]
SH (Palestinian) - [n]
Observed differences - None

MH - [s]
Palestinian Arabic - [s]
SH (literature) - [s]
SH (Israeli) - [s]
SH (Palestinian) - [s]
Observed differences - **None**

MH - [ʔ]
Palestinian Arabic - [ʕ]
SH (literature) - "guttural"
SH (Israeli) - "guttural"
SH (Palestinian) - "guttural"
Observed differences - **None**

MH - /p/ -> [p], [pʰ] syllable initial, [f]
Palestinian Arabic - [f]
SH (literature) - [f]
SH (Israeli) - [f]
SH (Palestinian) - [f]
Observed differences - **None**

MH - [ts] (affricate)
Palestinian Arabic - [sʰ]
SH (literature) - [sʰ]
SH (Israeli) - [s], [sʰ] (in free variation for individual speakers)
SH (Palestinian) - [s], [sʰ] (in free variation for individual speakers)
Observed differences - **Variation differs from literature; pharyngealization observed**
MH - [k]
Palestinian Arabic - [q] ([ʔ] common for many local dialects, though not observed)
SH (literature) - [q]
SH (Israeli) - [k], [q] (in free variation for individual speakers)
SH (Palestinian) - [q]
Observed differences - **Partial loss of emphatic among Israeli informants**

MH - [ʁ]
Palestinian Arabic - [r]
SH (literature) - [r] (with possible variation to [ʁ] among Modern Hebrew speakers)
SH (Israeli) - [r]
SH (Palestinian) - [r]
Observed differences - **None**

MH - /ʃ/, /s/ (generally two distinct phonemes due to ancient orthographic merger)
Palestinian Arabic - [ʃ]
SH (literature) - [ʃ]
SH (Israeli) - [ʃ]
SH (Palestinian) - [ʃ]
Observed differences - **None**

MH - /t/ → [t], [tʰ] syllable initial
Palestinian Arabic - [t]
SH (literature) - [t]
SH (Israeli) - /t/ → [t], [tʰ] syllable initial
SH (Palestinian) - [t]
Observed differences - **Syllable initial aspiration in Israeli informants**
4.3 - DISCUSSION

4.3.1 - EMPHATICS

As mentioned previously, the emphatics in Samaritan Hebrew include ט, ג, and כ.

Ben-Hayyim notes that, occasionally and under certain environments, non-emphatic phonemes which share an emphatic counterpart may be realized as emphatic. He goes on to note that he has "never encountered the opposite process, i.e., [s], [t] replacing /s/, /t/" (I have made changes to the phonetic symbols in the previous quote to put them more in line with the IPA transcription employed here). However, my results seem to indicate the opposite. While my data set is not yet large enough to suggest that emphatization on non-emphatic phonemes does not occur, it is fairly evident that emphatic phonemes can be realized as non-emphatic (2000: 37-38).

In the case of ט, no emphatic realizations were observed, either among the Israelis or the Palestinians. While Modern Hebrew has long since lost all emphatic distinction, Arabic still nominally retains it, making this especially surprising, given how all Samaritans, even those who do not speak Arabic as L1, knew to articulate the equivalent Arabic letter as the pharyngealized emphatic. This phenomenon therefore cannot be attributed solely to the influence of Modern Hebrew. However, it is possible that both Modern Hebrew and Arabic have influenced the language separately but in the same manner - emphatization of consonants is often lost in fast speech in Arabic, depending on the dialect spoken, and this loss from Samaritan Hebrew may reflect a general preference for non-emphatic consonants observed historically.

ג is also noteworthy, in that emphatic articulation is sometimes realized and sometimes not. In some cases, the same speaker, in repeating a word twice, will realize the letter as emphatic in one pronunciation and non-emphatic in the other. I should note that no clear pattern existed as to whether the first articulation was more accurate or the second - it appeared to be a random effect. This suggests a weakening of the emphatic character of the phoneme over time (as it is well established that the sound was originally only emphatic), and further supports the conclusions drawn from ט.

כ is a slightly different case since, while historically emphatic, it no longer patterns with other emphatics as it is not characterized by a secondary articulation. I include it here, however, both because of its traditional treatment and because it might exhibit a similar pattern to the other
two. The effects on this letter were somewhat more straightforward; no change was observed in the Palestinian Samaritan Hebrew articulation, despite the general variability observed in the equivalent Arabic letter, depending on dialect. However, as with ג, variation existed within Israeli Samaritan informants, again between tokens of the same word that were articulated back to back, and again with no clear pattern. Unsurprisingly, Israeli informants would sometimes realize the letter as [k], suggesting that, while they knew the "correct" pronunciation, they might occasionally get it wrong given greater familiarity with [k] over [q].

One difference between my analysis and Ben-Hayyim's should be addressed - namely, my interpretation of the secondary articulation of the emphatics ג and ס as pharyngealization, rather than velarization. I made this determination both by listening to the recordings and observing formant patterns; as Al-Tamimi has noted (2009), pharyngealization generally prompts an increase in F1 and a decrease in F2 in the surrounding vowels, a phenomenon which I observed directly in the case of the Arabic nonce words. While using this information with the real words was difficult, given vowel variation, the nonce words proved to have sufficient control of vowels to demonstrate the difference empirically.

Despite having relied heavily on the nonce words to make these determinations, I am fairly certain that I made the correct determinations with regards to the emphatic quality (or lack thereof) of the two letters above. I am less certain as to whether or not that emphasis is pharyngealization or, as Ben-Hayyim claims, velarization. It is possible that I cannot tell the difference, neither by ear or empirically. It is also possible that the term velarization, when employed by Ben-Hayyim, is roughly equivalent to my use of the word pharyngealization, given the difference in convention employed. Otherwise, this observation would suggest that an entirely separate change has occurred, possibly due to the influence of Arabic.

4.3.2 - ASPIRATION

While I have never found any indication in the literature that Modern Hebrew voiceless stops exhibit aspiration as a secondary articulatory feature in syllable initial position, I did observe this to be the case in the data I collected, both in the control informant and in the Israeli Samaritans. I should note that, unlike in English, /k/ did not pattern with /p/ and /t/ in this regard, and did not exhibit aspiration in any position; I am uncertain as to the reason for this irregularity.
The potential effects of this phenomenon in Samaritan Hebrew are fairly limited. First, Samaritan Hebrew, like Arabic, does not possess the [p] allophone (it is widely believed that this allophone was in the language historically but was lost due to Arabic influence). Meanwhile, because there is no [kʰ] allophone in Modern Hebrew, both Israeli and Palestinian Samaritans pronounce the Semitic ש the same way in their respective primary languages, meaning no influence is likely (nor, indeed, observed) in Samaritan Hebrew.

However, all Israeli Samaritan informants aspirate word initial occurrences of both ט and ג, while their Palestinian counterparts do not. While it is possible that aspiration was a feature that was lost in the case of the Palestinian Samaritans but was retained for the Israelis, I think it more likely that occurrences of [tʰ] are the result of influence from Modern Hebrew. This is due both to the phonology of Semitic languages historically and the likelihood that the phonology of Modern Hebrew, due to significant modern influence, is more readily different from Samaritan Hebrew than Arabic is.

4.3.3 - Voice Onset Time (VOT) of Voiced Stops

Given that voice/voiceless distinctions exist in the Semitic languages, it should be unsurprising that VOT quality is therefore distinctive in all three languages under consideration. However, unlike some languages, VOT quantity, when quality is restricted, is not distinctive in any of these languages - that is to say, a voiceless bilabial stop with a VOT of 50 ms is understood to be the same phoneme as a voiceless bilabial stop with a VOT of 200 ms. That being said, different languages tend to prefer VOT quantity to be restricted to a certain range for particular phonemes - while something outside of that range will be intelligible assuming quality is the same, it may be an indicator of foreign accent. For more information, in this case concerning Spanish speakers in particular, see Yavaş (2007).

Modern Hebrew VOTs for [b] and [d] were longer than the corresponding Arabic VOTs, almost all instances being greater in quantity than -100 ms, while all instances of [b] and [d] in Arabic were observed to be about 90 ms (while some minimal overlap exists for [d], Modern Hebrew was still definitely greater in quantity overall). Because Arabic does not possess a [g] allophone, comparison here is impossible; however, Modern Hebrew [g] patterns with the other voiced stops in this regard.
In the case of Samaritan Hebrew ț, only minimal difference was observed between Israeli and Palestinian Samaritans. However, a significant difference was present for 2, which patterned with the values present in the L1s for each group. It is also interesting to note that the VOT for ț for Palestinian Samaritans is particularly small compared to all other VOT values for voiced stops. While it is unclear what influence this phenomenon has had on the articulation of Samaritan Hebrew between the two groups, this data suggests that the VOTs of voiced stops in Samaritan Hebrew may have been closer to 0 ms historically - influence from both Modern Hebrew and Arabic may have lengthened this value when corresponding values were present to exert an effect.

4.3.4 - Rhotics

Rhotics, as a class of allophones that are already vaguely defined, are often one of the key features that determine accent difference. Indeed, it was the observation that American Hebrew speakers often articulate Modern Hebrew ܪ as the American [ɹ], rather than the general Israeli [ʁ], that originally suggested this study. Ben-Hayyim even suggests that the Samaritan Hebrew ܪ is sometimes articulated as [ʁ] by Samaritan Hebrew speakers, and so I was expecting to see this variability present in the data more than any other (2000: 32).

Interestingly, Samaritan Hebrew ܪ was, in every case and by every informant, clearly articulated as [r], regardless of L1. I found this surprising, especially given that Ben-Hayyim mentioned the opposite to be the case. This could simply be the result of an insufficient sample size - it is possible that other Israeli Samaritans read ܪ as [ʁ], or else that the informants I worked with do so in free variation, but never happened to when I was recording. It may also be possible that the community made an attempt to correct an observed error in the articulation of Samaritan Hebrew of many Israeli Samaritan speakers, and so this realization is no longer present.

4.3.5 - Gutturals

As discussed in section 1, I made a conscious decision not to narrowly define the four letters classified commonly classified as gutturals. Doing so was ultimately unnecessary; as can be seen from the data, no differences in articulation of any of these four letters were observed
between speakers, regardless of L1. While such differences may exist, no more conclusions can be drawn from the available data.

**4.3.6 - FRICATIZATION OF ב AND MODERN HEBREW STOP/FRICATIVE ALLOPHONY**

One of the most unusual features of the data is in the fricatization of ב in Samaritan Hebrew word #17, נְגָי. The first letter serves as a prefix, with the approximate meaning of "in" or "in the"; the word as a whole can be satisfactorily translated as "in the valley."

While variation existed in vowel quality and length, the general reading of the word by all Palestinian informants can best be approximated as [avgiːje]. The one exception to this was the Israeli Samaritan informant who read this word, where [v] was replaced by [f]. Unfortunately, I added this word to the list rather late, and only collected the one sample from the Israeli Samaritans; therefore, without further evidence that the devoicing observed in this instance is communal rather than individual, I will treat all five samples as a case of fricatization, without inspecting the differences between Israeli and Palestinian Samaritans further. As such, the phenomenon does not touch directly on the thesis question I have raised; however, I will discuss it briefly, as it is interesting and, to my admittedly limited knowledge, unattested.

Unlike the other dialects of Hebrew, the prefix above is preceded by an unmarked vowel, an unusual development that is unique to Samaritan Hebrew. Therefore, this unusual fricatization can be the result of either a morphophonemic phenomenon unique only to this morpheme, or else a more generally phonological phenomenon. As I have little other data containing articulation of the letter ב, and no other instances of fricatization of it, I cannot comment further.

While allophonic variation between stops and fricatives is a robust and attested phenomenon in Hebrew that goes back millennia, it is unlikely that this phenomenon, either currently in Modern Hebrew or at any other time, has had any influence in this case, given that the change is also observed among Palestinian Samaritans (Arabic lost this allophony, even while Hebrew retained it). Indeed, there is no evidence that allophony in Modern Hebrew has affected Samaritan Hebrew articulation whatsoever, which, though perhaps not surprising, is interesting. Even the variability in the letter כ in Modern Hebrew and Arabic has left Samaritan Hebrew unaffected (though the variable articulation of the letter as either [s] or [ʃ] is in fact not allophonic - refer back to section 2).
I should note that, according to Ben-Hayyim, the letter א is sometimes realized as the bilabial fricative [β] by certain speakers (2000: 32). While it is possible that I have misinterpreted the sound in the available data, I doubt that this is the case, or that this effect is speaker dependent, given how it is observed in all five speakers from whom data was elicited.

4.3.7 - ALLOPHONY OF SAMARITAN HEBREW ג

I should note briefly that I do not have any data relating to the allophony of the letter ג, variably realized as [l] or [lɣ], according to Ben-Hayyim. It is possible either that I did not elicit data in which this phoneme appeared in the conditioning environment (this is the only case of allophony throughout the language as a whole, after all), or else that my data demonstrates this phenomenon and I simply did not pick up on it. Regardless, no differences were observed in the articulation of this letter between the Israeli and Palestinian Samaritans.

4.4 - CONCLUSIONS AND FUTURE DIRECTIONS

The data above support the conclusion that a split in the L1 of the Samaritan community has resulted in differences between the two groups. Such differences have been observed specifically in the deemphaticization of emphatics, variable aspiration of word initial voiceless stops, and influence of Modern Hebrew and Palestinian Arabic VOTs on articulation.

Generally, the greater similarities between Palestinian Arabic and Samaritan Hebrew phonology have resulted in more limited change occurring in the Palestinian Samaritan group, while more significant change has occurred in the Israeli group; still, change has seemingly occurred in both since the establishment of the Samaritan community in Holon, seeing how many of the differences attested by the data are contrary to what is described by Ben-Hayyim.

4.4.1 - PARAMETERS FOR FURTHER STUDY

While the overall conclusion seems fairly certain, there still remains much work to be done to more accurately answer the question posed at the beginning of this thesis. First, many of the observations remain incompletely studied - for example, the question of whether the
realization of ز as a fricative in certain environments is due to a phonological process or a morphophonological rule remains unanswered. Further studies may also look at vowel effects, or else attempt to determine whether similar differences are observed in Samaritan Aramaic, the other literary language of the Samaritans.

Second, and importantly, this research was limited in several regards. In particular, there were no controls regarding education, reading speed (which has a direct impact on at least vowel quality, if not other features), age (with the one caveat that all informants be over the age of 18) etc., with the notable exception of sex (all informants were male). Furthermore, an increased sample size and a larger word list would be necessary to ensure that the data observed were not the result of statistical anomaly.

4.4.2 - THE NATURE OF THE PHONEME IN LITURGICAL LANGUAGES

The question of whether there are articulatory differences between the two Samaritan groups is a somewhat divisive one, as it contradicts certain religious claims regarding the immutability of the liturgical language. That being said, based on informal discussion, the Israeli Samaritan community generally acknowledges that the pronunciation of those in the Palestinian Territories is more faithful to the original, while the Palestinian Samaritans tend to be somewhat more averse to the fact.

Seeing how Samaritan Hebrew is no longer a spoken language and is used only in certain consistent contexts, it is worth investigating the extent to which phonemes in the language (and, indeed, any liturgical language) differ in function from those of spoken languages. Namely, given both the concept of the phoneme and the understanding that every token produced must be different from any other due to the non-quantized nature of sound, how much of a difference would legitimately be considered an unacceptable difference by the Samaritans? The answer to the philosophical and psychological question of what exactly a phoneme is has yet to be agreed upon; the conclusions of this study, cross-referenced with the perceptions of the Samaritans regarding the immutability of their language, may provide additional insight into how to approach these questions.
**4.4.3 - A WARNING REGARDING FUTURE STUDIES IN SAMARITAN HEBREW**

As stated previously, linguists who have studied the Samaritan linguistic tradition generally agree that little change has occurred since the 11th century. Furthermore, it is believed that the Samaritan tradition is uniquely faithful to the individual Temple-period dialect of Hebrew from which it developed, while the Jewish traditions have deviated more significantly from their sources over time.

Again, given the divergence in my observations with those of Ben-Hayyim and assuming the above conclusions to be accurate, it appears as though the Samaritan tradition has lost some of its purported stability over the last few decades. This possibility should be considered in future studies of the Samaritan linguistic tradition, as it would be unfortunate to attribute modern changes in the language to older phenomena.
References

Al-Tamimi J. Effect of pharyngealisation on vowels revisited: Static and Dynamic analyses of vowels in Moroccan and Jordanian Arabic. In: Workshop on Pharyngeals and Pharyngealisation. 2009, Newcastle University, UK.


Fassberg, Steven - Personal communication, 2014


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Yavaş, M. Factors Influencing the VOT of English Long Lag Stops and Interlanguage Phonology. 2007, Florida International University, USA.
What is Linguistics?

Linguistics as a discipline is, in its current form, fairly new. The simplest definition of linguistics is that it is the scientific study of language. Linguists take data from languages and generate hypotheses to explain patterns in that data. Oftentimes, the ultimate goal is to generalize about a language or languages so as to generate a predictive model for future use.

Linguistics has several sub-disciplines that are often associated with it, with basic definitions of each below:

Phonetics - The physical study of sound generated for language use
Phonology - The classification of sounds and how they pattern and change in language
Morphology - The study of how words are constructed
Syntax - The study of how sentences are constructed
Semantics - The study of meaning as it directly relates to the words in a language
Pragmatics - The study of meaning as it results from context

Clearly, there is a lot more to each discipline, and there are many more areas of study in the field, but the above definitions provide a very basic overview of linguistics as a whole. As I am investigating sound change in language, my thesis mostly focuses on phonology.

Phonemes

Phonemes are the core concept of phonology. Defining phonemes is difficult; however, a basic illustration can be drawn in English. Say the following phrase:

"Please stop."

Now focus on how you say the "p" sounds in the sentence. In the last sound, notice how you can either end the word abruptly, without making the "p" sound "strong," or you can emphasize it. For the first sound, notice how you always have a burst of air accompanying it.

In English, all of these sounds are considered, if not the same sound, then being roughly interchangeable. However, in other languages, they may not be. For example, in Hindi, the sound at the beginning of "please" is one sound and the sound at the end of "stop" is as different as "p" and "b" in English. Likewise, Korean doesn't really distinguish between "p" and "b"; it uses one in some circumstances and uses the other in others.

The overarching concept of a sound is called a phoneme, whereas the individual sounds are called allophones. Phonemes are represented by slash brackets (for example, /p/), whereas allophones are represented with square brackets (as in [p]). To represent the situation as described in English, then, we would write something like /p/→ [pʰ], [p], where the little "h" superscript in one of the allophones refers to the burst of air in word-initial "p", called aspiration. Likewise, the letter symbols in the brackets must be restricted to a single sound in order to be properly descriptive; the most commonly used system is the International Phonetic Alphabet, which correlates where and how we make sounds to unique symbols for each combination.
Corresponding Letters, Samaritan, Early Hebrew → Diringer Ben-Hayyim

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אליה והברים

1. אליה סכביום şeyר דבר משעה살 כל ישראל בכיבר חינימותברב צל רוח. על סוףו, בין פראות ובין מתכלה ליזראות וימות.
2. כן שארים יט מחבבר ערך העשה, עם שונים, עם ימות. והיה באה מברכת רבים בברכה, ויתר בברכם עשה של קדושה.
3. ברוך, ויתר בברכת ישות. ברוך, ייתר בברכת ישות. בברכות כל ישראל, כל באה ותורה, דבר משעה של כל ישראל.
VI - Matres Lectionis

All letters in Hebrew are consonants. However, some letters are occasionally used as markers for vowelization - remember that Hebrew originally didn't have a way of marking vowelization, and so this served as an intermediate step between what came before and the diacritics. Below are several representative examples:

- א - [lo]
- מילקמה - [milkama]
- דוד - [gadol]
- קום - [kum]
- צדיק - [tsadik]

The letters which often serve this function are: א,ה,ו,י.
- א usually "carries" a vowel; however, when appearing at the end of a word, it is silent.
- ה, when at the end of a word, is silent. Usually (but not always), this marks that the word ends with an [a] vowel.
- י, when it doesn't have a vowel marking on it, usually follows a letter with an [i] vowel. Think of the letter as signifying the presence of that vowel in these cases - it doesn't have its normal [y] sound.
- ו is somewhat more complicated. When the letter appears as ו or וה, it does not have its normal [v] sound, but rather "carries" the [u] or [o] sound, respectively. In these cases, you can just think of the letter-vowel combination itself as a single vowel.

While many of these letters (when fulfilling this vowel-like function) were originally not part of the words in which they appear, most are now considered a "part" of the word, and are necessary when spelling words out. There are sometimes (but not always - usually only in the case of conjugation) two exceptions: י and ו (when expressing the [o] sound only). For example, the two words below are completely equivalent to each other, and are interchangeable:

- שיבר - [jiber]
- שבר - [jiber]

However, in the example word above, צדיק is the only acceptable spelling. Furthermore, in the case of the [u] vowel וה, most appearances of this letter/vowel were actually originally part of the word, and took on vowel-like characteristics in a separate process. As a result, these are not removable - they are an original part of the word on which the meaning of the word is based.

References: The Semitic Languages - Robert Hetzron
XXIII - Semitic Roots

Different languages use fundamentally different systems to convey meaning. For example, some languages, like the various Chinese languages, generally convey meaning by assigning different concepts to individual words:

\[
\text{[wɔ mə tan tçin la]} \text{ (tones omitted)}
\]

1\text{st person pl. play piano past}

"We played the piano"

Note that, in the Mandarin example above, every unit conveys the smallest amount of meaning possible.

Hebrew and all other Semitic languages are relatively similar to European languages in that they are less extreme than Chinese in regard to meaning separation. However, they do display some notable differences from languages found in Europe; as a class, Semitic languages all exhibit characteristics which allow them to be characterized as templatic languages. No other languages exhibit a templatic structure (while there are some arguments to include North American languages in this group, they are somewhat controversial).

The first and most important characteristic of templatic languages is that of the root, or שֹׁרֶש. All verbs (and many nouns) are derived from a set of letters (nearly always three) which carry meaning, but not enough to be words in their own right. For example, words derived from the root ל.מ.ד all relate to learning in some way:

- לִלְמוֹד - to learn
- לְלַמֵד - to teach
- תַלְמִיד - student

Most nouns that are derived using roots do not use some sort of predictable or periodic method, and the number of nouns that are derived from a single root varies. Additionally, remember that there are many nouns that do not come from roots. However, all verbs come from these roots, and there is a (sort of) periodic template for deriving meaning - we will see this in the next section.

Once you know a particular root, you have a decent chance of being able to identify words from which it is derived. For example, if I told you that the root ב.ש.נ has to do with thinking, and then you were to see the word ב.ש.נ in an Israeli electronics magazine, you might be able to correctly guess that this word means "computer." Indeed, the word computer came from a similar, though slightly less formalized process.

Remember that roots aren't words, so they are provided on the vocab list in the standard three letter form, without any vowelization. Note that the infinitival meanings provided are not the "actual" meaning of the roots, just the half of the meaning which these roots bring to words. Also remember that there are multiple letters where a dot indicates "hardness" while lack thereof indicates "softness" - different words that derive from a single root may exhibit either a hard or soft sound depending on the environment, so don't get attached to the last sound in ב.ש.נ being [v] over [b], for example.

References: Languages Files (Eleventh Edition) - The Ohio State University
XXIV - Semitic Templates

Now that we've established the concept of roots, let's talk a little bit more about how Hebrew takes these roots and turns them into verbs.

Hebrew is typically regarded as having 7 templates, or בּוֹקָאָנֶס (note that I will sometimes use the term "building" instead of "template," as that is the translation of the Hebrew term). These templates are distinct sets of infinitival and conjugative forms into which the roots can be inserted. While roots carry the first third of the "meaning" that makes verbs, the templates carry the next two thirds - each template has a distinct linguistic character, as shown below:

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<th>root</th>
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<td>hitpa'el</td>
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Note that there is a symmetry to template meaning, as shown above. Those templates on the left are active, while those on the right are passive. Each "branch" connects the active and passive templates which share an alternate meaning quality (either standard, intensive, or causative). The central template is either reflexive or reciprocal, depending on the verb. The names of the templates are the 3rd person singular masculine past tense conjugation of the "filler" root פ.ע.ל.

You can think of the selection of a template as a preliminary step to conjugation that isn't necessary in non-Semitic languages. Note that, while each of these templates technically has a particular character (for example, "reflexive"), there are many instances where the meanings don't actually match up with what is provided above. Therefore, the meanings provided above are a good guide to analyzing words for which you've identified a template, but should not be relied upon.

Remember that, as we saw in the previous notes, one root can go in more than one template. However, most roots do not fit into all of them; which templates can be used for which roots is somewhat random.

The good news in all of this is that Hebrew only has three tenses: past, present, and future (at least, with the basic interpretation that we will use). The existence of 7 templates leads to 21 sets of conjugations, which on the surface might seem intimidating. However, all tense conjugations follow the same pattern throughout all buildings, so by learning the paradigms for the basic פַּעַל form and by studying some of the key differences between the templates, you should be sufficiently equipped to translate almost any verb you come across.

Difficulty
in some
English
writers?

Notice words

MH

Arabic

96
### MH Words

| 1 | מַחְלָכָה   |
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### SH Words

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| 7 | מַנְחֵן |
| 8 | מַנְחֵן |
| 9 | מַנְחֵן |
| 10| מַנְחֵן |
| 11| מַנְחֵן |
| 12| מַנְחֵן |
| 13| מַנְחֵן |
| 14| מַנְחֵן |
| 15| מַנְחֵן |
| 16| מַנְחֵן |
| 17| מַנְחֵן |
| 18| מַנְחֵן |

### Deleted Words
- Delete (not in SH)
- Delete (misspelled)

### Arabic Words

| 1 | نَفَس |
| 2 | سَماَك |
| 3 | Delete (misspelled) |
| 4 | سَوق |
| 5 | سَكِب |
| 6 | Delete (misspelled) |
| 7 | مَمْرَأ |
| 8 | رَاس |
| 9 | ٥٠٨٢ |