A CORRELATION ANALYSIS OF LOW-LEVEL CONFLICT IN
NORTH AFRICAN BERBER GROUPS, 1990-2011

A Thesis
submitted to the Faculty of
The School of Continuing Studies
and of
The Graduate School of Arts and Sciences
In partial fulfillment of the requirements for the
degree of
Master of Arts in Liberal Studies

By

Suzanne Hollands, B.A.

Georgetown University
Washington, D.C.
April 10, 2014
A CORRELATION ANALYSIS OF LOW-LEVEL CONFLICT IN NORTH AFRICAN BERBER GROUPS, 1990-2011

Suzanne Hollands-Sibley, B.A.

MALS Mentors: John O. Voll, Ph.D., Andy Vogt, Ph.D.

ABSTRACT

Berber regions of North Africa have long resisted incursion from the outside world. Regional conquests from the Punics, Greeks and Romans were repeatedly met with persistent and at times violent resistance, particularly under Greek and Roman rule. With the Arab conquest in the seventh century AD, the depth of penetration into Berber culture was fundamentally altered, particularly in the area of religion and language. Though still committed to Islam as a religion, recent Berber movements have shown a marked resistance to Arab cultural identity, seeking instead to re-establish a purely Berber cultural ethos through the revival of their indigenous Amazigh language and customs. Because their former identity precedes the advent of Islam, the Berber have recently sought to reconcile their ancient cultural heritage, particularly their language, with a religion they adopted in the seventh century but whose very language they conceive of as that of a former oppressor. Rather than rejecting Islam, they choose instead to reinvent it, replacing the sacred Arabic language of the Qurán with their lingua franca – Tamazight – in their practice of Islam, thereby uniting both culture and religion and reinforcing a cultural identity. The source of Berber identity prior to Arab domination is difficult to establish. Sources of Arab domination in the Maghreb are prevalent, but sources for
pre-Arab dominance are more scant and to date mostly rely on inconclusive archaeological data. Attempts at identifying a uniquely Berber origin have been tainted by prevailing rule: French domination was characterized by the perception of France as inheritor of Roman civilization, the ‘higher race’ recapturing past glories, duty-bound to civilize the Maghreb’s ‘inferior’ races. Arab rule found the Berber to be uncivilized and unworthy, as did the Greeks and Romans before them, with historical accounts describing the Berber as a collection of inherently unruly, rebellious tribes, with little capacity for cohesion and reliable self-governance. But how accurate are these early accounts given the bias of these early historians? Some regional governments have recently begun to recognize the unique Berber status as the First Peoples of North Africa while others have instead ignored any attempts to acknowledge Berber identity.

This study examines the Berber situation both historically and in the present day and looks at statistics concerning the geography of North Africa, current locations of Berber groups, and data on civil unrest for the period 1990-2011. Among other things the study reviews Berber pre-history and the biases reported by M. Ghambou (Chapter 1), reviews Berber history during successive conquests (Chapter 2), and examines the Berber plight today (Chapter 3). Chapter 4 examines the distribution of the 48 known Berber populations groups across North Africa, together with their locations and sizes. Chapter 5 looks at current events in the Maghreb on a country-by-country basis. In Chapter 6 relationships are sought between provincial-level Berber presence and civilian unrest for the period 1990-2011. Finally in the Conclusion some overall conclusions are drawn regarding the current Berber situation, noting dangers and opportunities the future might hold.
ACKNOWLEDGEMENTS

I would like to express my gratitude to Professor John Voll and Professor Andrew Vogt, my research mentors, for their useful critiques of this research work. I would also like to extend particular thanks to Professor Keith Ord for his patient guidance and useful critiques of this research work and whose advice and assistance were crucial to its completion. My grateful thanks are also extended to Mrs. Anne Ridder for her kind assistance.

Finally, I wish to thank my family for their support and encouragement throughout this project. The product of this research paper would not have been possible without all of their support.
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INTRODUCTION, PRIMARY SOURCES, AND METHODOLOGY

The SCAD Dataset

The source of data for this study came from the Social Conflict in Africa Database (SCAD)\(^1\) under the Strauss Center for International Security and Law at the University of Texas at Austin and in collaboration with other universities. From the SCAD database only those events pertaining to Algeria, Egypt, Libya, Morocco, and Tunisia covering the twenty-one year period from 1990 to 2011 were used. The resulting data was used to determine where SCAD events occurred, focusing on locations whether they occurred in Berber or non-Berber regions.

The SCAD database was chosen because no other low-level data covering these five North African countries was found to contain sufficient timespan and geo-coordinates (latitude, longitude). Geo-coordinates were necessary in order to determine whether events occurred in particular ethnic areas which are pinpointed using geo-referencing tools and mapping software (QGIS). Problems were encountered in using the SCAD dataset and as adjustments were made footnotes were used accordingly. In particular, contradictions were noted between SCAD reported geo-coordinates and the city or other-named locations of the event (called \textit{e}local by SCAD). To circumvent this problem, for each event, the SCAD geo-coordinates were used, and not the \textit{e}local heading for the event. \textit{E}local were universally dropped and do not appear at all in this study.

Mapping event geo-coordinates was done using two geographic information software systems, ESRI’s Arc Map (Desktop version 10.1), and Quantum GIS (QGIS and currently using the 1.8.0 version), an open source version of the same type of software system. Administrative

\(^1\) Social Conflict in Africa Database (SCAD) \url{https://www.strausscenter.org/scad.html} (accessed 1/14/2013).
units (provinces) for each of the five countries were pulled from Arc Map 10.1 using a shapefile and then inserted into QGIS, and the 1,036 event geo-coordinates were then plotted by the software onto the resulting map, with events being plotted to the precise geo-coordinate from the original SCAD source data, but embedded within the software and reflective of all border types. The SCAD data points were then visualized within the context of national boundaries (borders), provincial boundaries and, once the Ethnologue\(^2\) ethnic shapefile was outlined, SCAD were visible within the ethnic boundaries embedded in the shapefile described by Ethnologue maps.

*Nationwide*

The SCAD data was encoded at the source listing latitude and longitude for each event. When events were designated in the news report as ‘nationwide’ SCAD administration assigns such events to a centroid\(^3\) location for the whole nation, which is used to represent the occurrence of these events for the entire nation. For the five countries are involved here, there are five (5) corresponding nationwide centroids: Algeria’s centroid province is Tamanghasset, Egypt’s is Wadi al Jadeed, Libya’s is Murzuq, Souss Massa Draa is Morocco’s centroid, and Gabès for Tunisia.

\(^2\) Ethnologue Languages of the World. Used as a proxy for ethnicity in this work. [https://www.ethnologue.com/](https://www.ethnologue.com/)

\(^3\) A centroid is the geometric center of a feature. For a line it is the midpoint for a polygon it would be the center of the area, and for a 3-dimational figure it would be the center of volume. Morocco’s centroid is latitude 31.82548, and longitude -6.103897 and corresponds to an uninhabited area in the Atlas and about 86 kilometers from the nearest town, Azilal, in Tadla-Azilal province. Tasha Wade and Shelly Sommer, eds. *A to Z GIS* (New York: ESRI Press, 2006), 29.
Once the data pertaining to the five countries was extracted, it was then analyzed again for various anomalies (such as events labeled “nationwide” or “unknown” \((\text{locnum} = 7, -99)\)), and the “note” section of the original data was consulted to determine how best to resolve the discrepancy. For example, SCAD events are coded into 46 different levels or ‘fields’: start date, end date, duration, the type of demonstration or protest (called etype), escalation actors, target, etc. Where an event is coded for location (called locum in the SCAD dataset), there are 8 different possibilities, one of which is ‘nationwide’. This indicates an event which had national repercussions, as opposed to one that occurred in a particular city, or other urban areas, or even one in a rural area. But because each event has to be coded according to the location (locnum), along with 45 other qualifiers for each individual event, the coder entering the data has to decide upon and assign a specific geo-location to the event. When an event is coded as ‘nationwide’, a code number is assigned to the event (‘7’ is the code for nationwide) under the locum column.

To obtain nationwide and unknown events\(^4,5\), all events were tabulated and reassessed for location based on the notes\(^6\) for each such event in the dataset and from which particulars regarding each event are given. It should be mentioned here that such inconsistencies are inevitable due to the very nature of the SCAD data sources: Information is derived from Agence

\(^4\) The following explanation is taken from the Codebook for the SCAD database 3.0 and can be downloaded from the site (please see earlier footnote): “For several events, the location is listed as being “nationwide” or “unknown” \((\text{locnum} 7, -99)\). These events are assigned at or near the centroid, or geographic center point, of the country. For the sake of clarity, for location “unknown” events, the point was offset from “nationwide” by subtracting 0.5 from the longitude and latitude, with the exception of very small countries where small increments were used.”

\(^5\) Of the 1,036 events pulled from the SCAD database, eight (8) were of ‘unknown’ location, and one hundred and twenty-five (125) were listed as ‘nationwide’.

\(^6\) SCAD lists notes for each event under the column heading issue note, which is frequently consulted for purposes of disambiguation.
France Presse and Associated Press newswires, as compiled by Lexis-Nexis news service. The events are disassembled, and, as mentioned previously, are subsequently coded according 46 fields, then field values are entered into the database accordingly. Because press releases may sometimes lack specific event locations, SCAD recourse was to encode the event as best possible and leave inclusion/exclusion to the discretion of the user. Compounding error possibilities are noted. Event conflict data taken from the Social Conflict Africa Database (SCAD) derived from a number of different sources, covering from January 1990 onwards. This paper will only cover January 1990 up to the end of 2011.

Interpretation of data at source can be another source of error in the SCAD database. Because the news wires and news stories are received in French and some in Arabic, translations issues come into play and errors in coding may ensue which are then reflected in any future results.

Completeness is another possible source of error, where events that actually occurred are not included. A story coming in without the requisite information for coding is dropped causing actual data not to be reflected in the database; only complete data is recorded with each event requiring encoding along 46 variables and eighty (80) sub-variables before inclusion in the SCAD Codebook. Inclusion in the dataset even more restrictive: Any errors to have

7. See footnote 1 above for access information on the SCAD codebook and coding procedures.
8. Ibid.
9. As mentioned earlier these include Lexis-Nexis news services, primarily Agence France Presse and the Associated Press.
occurred will necessarily have repercussions in the results and subsequent conclusions drawn which might be drawn. Overall, data information accuracy in the SCAD database is very sensitive to human error as seen from their codebook:

During periods of civil conflict, defined by the start and end dates in the *Uppsala Armed Conflict Database* ... do not code [sic] violent events associated with the civil conflicts. If Actor1, Actor2, or Actor3 is the government, a quasi-governmental organization (i.e., paramilitary organization), or the rebel organization, and these acts are directly linked to the civil conflict, the event should not be coded.11

This analysis will bear the imprint of any initial error, so due to these inherent limitations in data collection, expectation here is for a general trend of events as they have evolved over the past twenty-one years: locating the predominance of social conflict events and attempting to derive their sources – Berber or non-Berber.

Social conflict data for SCAD purposes are low-level events such as demonstrations, protests. They tend to occur in a large, populous city like Rabat, a capital city, where protestors obtain better recognition for their cause: It would hardly make sense for demonstrators against some foreign power to arrange demonstrations where no press is available to publicize the event. Demonstrators will make every effort to locate themselves where they can maximize their exposure – usually a capital city or some large urban area.

What about events occurring in lesser-sized city, would that be as significant, and if so, how significant? This leads to a slightly more nuanced explanation than just looking at the actual number of events in a given political administrative region (province) and more precisely tries to define the driving force behind low-level social conflict events.

11. Ibid., 1-10.
Nowhere in this study are we looking at high-level social conflict such as civil wars, only at protests, demonstrations and other low-level social conflict. High level conflict involves a host of contributing factors, some of which are comparable to low-level conflict, others not. Though low-level conflicts can involve deaths, they are not as considerable for the high-level conflict and for the most part are accidental to the events. An all too common example of deaths incurred in the SCAD events are those resulting from the interplay between protesters and police or other state-sponsored policing agency (army, national guard, etc.). The intent of the protesters/demonstrators was, at least at the outset, to make a peaceful demonstration of their objections, with no initial intent at escalation and only when the situation gets out of hand do deaths occur: deaths in such cases are incidental.

The Ethnologue Dataset

Ethnologue ethnic population data and ethnic maps were the single source of ethnic data the author could find. Unfortunately the Berber ethnic maps, one for Morocco, Algeria, and Tunisia, the second for Libya and Egypt are undated with no source material listed. With more recent survey data and possibly by incorporating CIESEN technology, perhaps Ethnologue maps could be redrawn with more accurate outcomes all round.
CHAPTER 1
BERBER IDENTITY IN CLASSICAL TIMES

Berber identity was formed well before the arrival of outside colonizing forces. Before Carthaginian cities dotted the northern rim of Africa in the 10th century B.C., archaeology shows the Berber tribes trading across the vast expanse from modern day Morocco to the Nile. With the arrival of Greeks in the 7th century B.C., began a vague account of the Berber tribes, though not until Herodotus (5th century B.C.) was anything about them actually recorded. Despite the bias of this and later ancient accounts of the Berber, an inherent trait can be traced back even to the earliest times, an aloofness and sense of independence characterized by the name they call themselves - Amazigh, meaning ‘free men”.

This chapter deals with the search for Berber identity today, a search which attempts to anchor that identity in a pre-colonial past but which nevertheless confirms the Berber as a unique people in their own right. Their quest is to be defined not by the trappings of the past, nor by a common colonially-acquired religion, but by the uniqueness of a self-defined Berber culture.

The Berber have suffered the plight of many conquered ethnic groups, their identity effaced by colonizing forces. But situated as they are at the confluence of Mediterranean civilization they, more than most, have borne successive assaults to their cultural identity. The following seeks to frame Berber identity as they perceive it as the ‘first people of North Africa, defined neither by religion, nor as members of a pan-Arab community, but rather as a particular ethnic community, distinct from Arab and Mediterranean regional cohorts, and with a unique history.
M. Ghambou claims that Berber identity precedes Islam, and that the recent Berber movement seeks to uncover the Berber roots which precede the Arab conquest. He further claims that Berber historians and historiographers have sought to validate the Berber ethnic identity by referencing ancient Greek and Roman sources whose textual references are deemed sufficiently venerable to challenge the “holiness” of later “Islamic and Arab hermeneutics”.

The concern among Berber scholars is the ideological manipulation and absorption of Berber “cultural specificity” within Islam which together conspire to erase Berber memory.

Berber identity, Ghambou claims, has been effaced from North African history books, hardly even acknowledging the names of former Berber kings, historical places and battles, and even where historical Berber leaders are acknowledged, they are given scant coverage. The response among Berber historians has been to resurrect references to popular Berber historical heroes such as Masinissa, Yugarthen (Jugurtha) and Yuba (Juba) from original ancient sources. The result among the Berber population of the Maghreb has been a proliferation in the Berber regions of the Kabyle, Rif, and Atlas mountains of these ancient Berber names. Much to the chagrin of local imams, religious scholars and Arab nationalists the Berber children have become the epitomes of the Berber past:

...Families in Kabylia, the Atlas Mountains and the Rif are naming their children “Masinissa”, “Yuga”, “Yugarthen” or “Numidia”. Confirmed by Greek and Roman


2. Ibid., 154.

3. Ibid.

sources on the one hand, and hardly acknowledged by North African history books on the other, these names continue to spread despite the strong resistance from imams, religious scholars, Arab nationalists, and political authorities”.  

To the Berber mind, the Islamic conquest in the seventh century “not only concerns the future of Imazighen⁵, but also condemns their past to a complete darkness”⁷. Indoctrination of pre-Islamic jahiliya⁸ begins in early childhood and conveniently anathematizes any identity prior to Islam as meaningless and inconsequential, a void awaiting the creation of the only true religion. Since Berber identity precedes Islam, jahiliya essentially negates everything the Berber stand for, essentially invalidating their identity. The ‘opening’, or futuhat⁹, creates a new history, a new beginning before which all else was invalid. For the Berber this alternate view of North Africa’s history prior to Islam places Berber history in the context of an historical discontinuity, negating their ethnic identity. Rather than celebratory and revelatory, the ‘conquest’ as implied by futuhat becomes the source of ethnic disfigurement, relegating the Berber to a socially

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⁶. Imazighen is the plural form of Amazigh, means “free man” in the Tamazight language and is how the Berber refer to themselves.


⁹. Futuhat from The Arabic root, fataha, and has the basic meaning “to open.” In the context of battle, futūḥ has the general connotation of “victory” or “conquest” but derives from the idea of God “opening” a way. Futūḥ is alms, donations, and charity given to Ṣūfī shaykhs, dervishes, and their communities. Futūḥ is an extension of the Islamic obligation of charitable giving (zakāt, ṣadaqa) and the general exhortation for Muslims to give financial and material donations (clothing, food, and housing) to those in need. Brill’s Encyclopaedia of Islam http://referenceworks.brillonline.com.proxy.library.georgetown.edu/search?s.q=futuhat (accessed October 7, 2013).
inferior class. According to Ghambou, the various Berber nations’ social and political structures had been distinct from European and Middle Eastern counterparts. While the Eastern tribal system was (and is) distinguished by sheikhs and caliphates, Berber gentes/nations prior to the conquest were characteristically non-despotic and deliberately secular\(^\text{10}\). Ghambou is nevertheless quick to negate any notion of “anti-Islam” in invoking the Latins and Greeks, explaining that the need to self-identify as a group is at the heart of the Berber compulsion - to “identify its origins, history or collective memory,”\(^\text{11}\) and in no way negates the Berber commitment to Islam as a religious institution.

But in distinguishing the Berber as unique and apart, Ghambou appears to restrict the concept of \textit{umma} to the religious domain, causing this approach to appear at odds with the very concept of \textit{umma} itself which constitutes the collective of Islam. Surely recognition of the Berber ethnic group has inherent within itself distain of the \textit{umma} as a religious community? No small wonder Islamic clerics are so much at odds with the Berber movement. Nor does Berber ‘uniqueness’ endear itself to the ruling parties within the North African states, particularly when the Berber self-identify no only as a ‘nation’, but a nation replete with history, identity, and judging by the Kabyle and the Rif regions, also specific Berber enclaves with very much their own in culture and language. The Berber identity movement has garnered significant momentum in past decades, accumulated over years of strife and under different régimes and throughout the many cultural milieus of the North African continent. In every instance North African governments have sought to efface or somehow nullify indigenous identity in favor of

\(^{10}\) Deliberately secular, Ghambou asserts, because the political and religious were “kept separate” and here he cites Alcocein Iskan, Ghambou, "Numidian,"155.

\(^{11}\) Ghambou, "Numidian,"156.
either nationalism or Zaydan’s persistently evanescent Pan-Arabism. Despite attempts to suppress, undermine of eradicate it, Berber identity not only survives but today, despite all predictions to the contrary the Berber movement is experiencing an ever-increasing popularity.

Ghambou’s complaint is that in reconstructing a Berber past worthy of Islamic scrutiny, Berber scholars rely on Greek and Roman sources which, to his mind, do not properly represent Berber history. To his mind, Greek and Roman accounts so distort the history of North Africa that subsequent histories, written under subsequent conquests, further compound these initial errors resulting in an unrecognizable and irrelevant account of both people and events. The compounding error effect on subsequent history, based on classical accounts of events was sequentially compounded under Byzantine, Arab, Turkish and finally French accounts which, Ghambou claims, presents an inaccurate and derogatory account of the Berber and relegates them to an inferior status.

To begin with the Greeks and Latins represented the Berber as nomads and pastoralists rather than agriculturalists which, to Ghambou’s mind, is a comment on the Berber lack of ‘culture’ and a deliberate slight on their inherent inability to be ‘cultivated’12. He complains of Herodotus’ generalist view of the Berber as “uncivilized and uncivilizable [sic]” and wonders at the latter’s reputation as the ‘father of History’ given his lack discernment of different Berber ethnic groups, and his errors in identifying native ‘Libyan’ tribal entities and their locations within Africa.

12. The point here is that pastoral/nomad Numidian and sedentary agriculture are diametrically opposed with agri-culture being a step closer to culture and therefore (in the mind of the Greeks and Romans, and therefore also much later to the French) not requiring recognition as a people, but simply being seen as a tribe. The uncivilized savage having neither the desire nor the capacity to cultivate the very land he occupies.
Not only does Ghambou see the Latin and Greek views of Numidian\(^{13}\) as nomad (etymology of Numidian) as inaccurate but he also points to the problem inherent in these early descriptions of the Berber which were later used by both the Arabs and the French to colour history in their own terms. Because ancient historians used the terms nomad, barbarian (etymology of Berber), pastoralist and other culturally charged terms, and because descriptions were frequently ambiguous and general, errors became frequent. But only with the advent of archaeology was the concept of Berber as itinerant, as nomad, as ‘uncultured’, and therefore as an inferior individual, finally dispelled, and by then the damage to the Berber image was already complete. The image of the Berber people in the eyes not only of their conquerors but also in their own eyes had already been transformed.

The Arabs and French, says Ghambou, seized upon such self-defined terms of Berber inferiority and used them to their advantage. If, for example, an ancient Greek scholar had named the people of North African ‘Berber’ it was because they were ‘barbarian’, and the application carried forward to modern times. Lost was etymology of the word, all that remained was the inherently pejorative term. The fact that 5\(^{th}\) century BC Greece referred to anything non-Greek as ‘barbarian’, including the Egyptians on whose civilization much of theirs was based was lost to the reader. The denigration wasn’t helped by Ibn Khaldûn, purportedly the ‘historian of the Berbers’, who describes them in the following decidedly unflattering passage:

Their language is not only foreign but of a special kind, which is why they are called Berbers. They say that when Ifriqish, son of Qays, son of Sayfi, one of the Tubba’s (kings of the Yemen), invaded the Maghrib and Ifriqiya (to which, they say, he gave his name), killing Jurjis, the king, and building villages and towns, he encountered this strange race with its peculiar tongue, and struck with amazement exclaimed: ‘What a Barbara you

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\(^{13}\) Numidian: the name is derived from the Latin of *nomad*. For more details see the following where Ghambou describes Ali Wahidi’s “Nadra tarikhiya an al-mamalik al-amazighiya,” in Ennaji, Le substrat, 56. See: Ghambou, “Numidian,” 156.
have!’ For this reason, they were called the Berbers. The word Barbara in Arabic means a mixture of unintelligible noises, applied for example to the roaring of a lion. This becomes an effective and all too familiar stratagem. By imposing a ‘superior’ culture, the conqueror becomes the inheritor of a superior ethos and as a result is in a better position to ‘cultivate’ the unruly and barbarian Berber.

Although Ghambou’s point that the Berber identity has been effectively attenuated, if not effaced, in much of the former Berber territory, it is difficult to reconcile his vehement and repeated criticism of the Greek and Latin historians and his inability to properly conceptualize their writings in historical context. Herodotus becomes “the agent of Athenian imperialism” rather than the “father of history”, who categorizes North Africa, in a single sweep from Egypt to Morocco, as the same as what was visible to them at the time – sight unseen:

All the way from Egypt to Lake Tritonis, then, the Libyans are nomads who eat meat and drink milk. Granted the errors in the Histories are substantial and easily criticized when viewed from the modern perspective, but in Herodotus’ case at least, perhaps an alternative perspective would be more appropriate:

The study of sources, from which the word Quellenforschung has established itself in languages other than its native German, is not a fashionable activity at the beginning of the twenty-first century AD. Quellenforschung was rigorous, at times excessively so, in that it tended to assume complete rationality and a modern scientific attitude (preference for the earlier and ‘better’ over the later and more derivative source, and so forth). On the part of the ancient authors it studied. It assumed in fact that ancient authors with their unwieldy and arbitrary collections of papyrus rolls operated like

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modern scholars in their libraries, who read and write in rooms furnished floor-to-ceiling with shelves which contain good and instantly accessible texts, and who are armed with author-specific lexica and (nowadays) with electronic data-bases which enable them to chase linguistic parallels in a few seconds of time (see Hornblower (1994a) 71f). The present chapter is an attempt at the looser rather than the stricter enterprise; it is concerned with what is now known as intertextuality rather than Quellenforschung: in fact with Herodotus’ relationship to his literary sources (the relationship with his text to other texts) and to his oral sources (one aspect of the relationship of his text to the world). 17

Ghambou appears to be conflating ancient raconteur of historical narrative with modern historian and appears oblivious to Herodotus’ interpretation of events in light of his intended audience. 18, 19 The primary objective of the Histories was to captivate and titillate the Greek audience, and only secondarily to instruct them. Herodotus’ travels “though extensive, never went beyond the familiar central parts of the oikoumenē. 20 For the fringe regions, he depended on a few travelers’ tales and his only way of checking was often his own rational mind. 21 Ghambou is offended at Herodotus’ ambiguities, inaccuracies, lack of objectivity, and complains that Herodotus and his cohorts appear more interested in recounting a story then in cataloguing facts. For his time, the 5th century BC, and considering that Herodotus finished writing his accounts in Greece and that was writing for his fellow Greeks, he does an exceptional job of


20. oikoumenē, literally means “the inhabited (land).” It was “originally used by the Greeks to denote the land inhabited by themselves, in contrast with barbarian countries; afterward, when the Greeks became subject to the Romans, ‘the entire Roman world;’ still later, for ‘the whole inhabited world’ " (WS, 140,141).

attempting to accept different cultures and conventions (*nomos*\(^{22}\) and *nomoi*) on their own terms. He effectively relates information to the reader while still maintaining a captivating style attractive to the 5\(^{th}\) c. BC Greek reader and always seeking out cultural differences and similarities. It is an account of the known world of the time, of its people, geography, culture and histories, inspired by the principle of the *logos* and it was so that he entitled his books:\(^{23}\)

While the larger ethnographical *logoi* or excursuses had a well-defined place in the scope of his great history-countries such as Egypt, Scythia, and Libya were described when they first emerged in the history of the Persian empire- the fringes were just appendices. They were not necessary, but certainly entertaining.\(^{24}\) The fringes were different, completely different, which fascinated Herodotus and probably his readers, too. An often returning theme is the relativity of manners (see Dihle (1981) 196 ff.), discussed in a way sometimes called inverse ethnocentrism.\(^{25}\)

Ghambou may not be satisfied with ancient Roman and Greek historians but his criticism, two millennia later, is unfounded. Classical ethnography is perhaps best accomplished by comparing different accounts of regions described by ancient historians and comparing them in light of Greek literary tradition and its sources or, alternatively by comparing an account with current archaeological evidence.\(^{26}\)

A fascinating finding regarding early ethnography by Rossellini and Said (1978)\(^{27}\) goes a long way in shedding some light on these early historians and shows a definite pattern to their

\(^{22}\) *nomos* refers to provisional codes (habits or customs) of social and political behavior, socially constructed and historically (even geographically) specific.


\(^{25}\) Klaus Karttenen “The Ethnography of the Fringes,” 459.

\(^{26}\) Ibid., 460.

ethnography which can be dated back as far as Homer. The ethnographic pattern consists of three concentric circles with Greece, predictably, at the center; the next circle is termed ‘intermediate’ and contains tribes and nomads; the third and outermost circle contains the savages. The range of complexity begins at the centre, the Greek ‘centre’ and would encompass the known Greek world of the Iron Age, characterized by an ordered, complex society. Progressing to the outer circles, all elements of society are described as being less complex with the simplest of existences taking place in a “primitive anarchy of the fringes” – society in the outer limits of the Greek world.

This perspective affords an insight into the ageless bounds of ethnocentrism and can also be helpful in illustrating a euphemism which is still used to describe the economic status of a nation according to today’s Western concept of civilization: first world, second world, third world, where the ‘first world’ is perceived as the most ‘developed’ economically and culturally, the second world is approaching the first but hasn’t attained the desired level of development and the third world is viewed as and one far removed from the desired standards of economic development, culture and social and civil rights. The similarity to the Herodotean concentric circles of ethnocentrism is obvious and important to bear in mind when reading the Greeks and Romans.

As mentioned earlier, Herodotus wrote in large part, for entertainment. As an intellectually well-rounded Greek male of the upper class, it was expected of him to contribute to the culture of Greece at the time. The Histories were used in large part as entertainment to regale Greek audiences about one of their favorite topics, the lore of other lands beyond that experienced by the ancient Greek in everyday life. In Herodotus’ time, Ghambou fails to recognize, Greece was the centre of the known universe. That is, it was at the centre of its own
ethnocentric Greek universe and from which position everything followed. In other words, both Herodotus and his Greek audience perceived anything non-Greek as being immediately inferior. The concept of the world according to Greek view necessarily has everything Greek at the epicenter, Greek art, Greek politics, Greek democracy, Greek everything. Just outside the center lies people of lesser distinction whom the Greeks called barbarians, a group in why they included the Egyptians, the Persians, et cetera, and in the third and last sphere were all other people of the world. The Greek position was rigid in its sense of its own superiority and of the inferiority of all others. That the Egyptians, who had taught so much to the Greeks in terms of art, medicine and mathematics could be considered inferior to them attests to their feeling of self-importance at having attained what they perceived as the pinnacle of culture and civilization unequalled in the world before, and to some Greeks, even since. Yet there were some incompatibilities with the Greek desire for knowledge about their world, Plato’s suggests that acculturation policies should be instituted in order to preserve social order might to some extent explain Herodotus’ ambivalence in straying too from instituted Greek boundaries, a concept which seems to trouble Ghambou:28

Now free intercourse between different states has the tendency to produce all manner of admixture of characters, as the itch for innovation is caught by host from visitor or visitor from host. Now this may result in the most detrimental consequences to a society where public life is sound and controlled by right laws, though in most communities where the laws are far from what they should be, it makes no real difference that the inhabitants should welcome the foreign visitor and blend with him, or take a jaunt into another state themselves, as and when the fancy for travel takes hold of them, young or old. On the other side, to refuse all admission to the foreigner and permit the native no opportunity of foreign travel is, for one thing, not always possible, and, for another, may earn a state a reputation for barbarism and inhumanity with the rest of the world; its citizens will be thought to be adopting the ill-sounding policy of exclusion of aliens and developing a repulsive and intractable character.29


But Ghambou seems not to acknowledge this and in so doing is guilty of Herodotus’ own lacuna of ethnocentrism. Ancient historians must be taken in context, and in Herodotus’ case it seems important to glean from his accounts what he calls the ‘facts’: that there are gentes living in Libya who graze their animals on large fertile plains, others who cultivate their lands, others still who eat the Lotus plant\textsuperscript{30, 31}, others who practice subterranean irrigation (Garamantes), others who share their wives, and so on. He writes of second-hand accounts as well as first-hand accounts and he also re-wrote the Histories after their first readings, making it as appealing as possible to the Greek ear, perfecting both language and rhythm to be worthy of performance at symposia. The audience was key to the writing of the Histories, the account of facts was somewhat secondary and at times incidental to the facts and by necessity the end product had to be sufficiently entertaining and necessarily politically adroit: it wouldn’t have been appropriate to convey superiority of non-Greeks of any kind to an audience who considered itself the \textit{sine qua non} of existing civilizations.

\textit{Berber as separate entity within the umma}

The idea of the Berber occupying a separate, unique position within the Islamic community defies the concept of Islam as an \textit{umma}, because the umma \textit{is the} superseding entity unifying all Muslims, with each individual being part of an overarching super-identity. Ghambou asserts that \textit{though} the Berber consider themselves Muslim, they cannot conceive of religion as a sufficiently unique collective identifier that it should subsume a past and present

\textsuperscript{30} The Lotophagii were a people who subsisted on the lotus flower, says Herodotus, and spanned the region from today’s Gulf of Gabès (Sfax) in Tunisia (\textit{Syrtis minor}) to the Gulf of Sirte in Libya (\textit{Syrtis major}).

identity. Ethnic identity, he claims, and not religion, more precisely identifies who the Berber are and what cultural attributes set them apart from other Algerians, Moroccans, Tunisians, Libyans, and Egyptians. This Berber choice to give pride of place to an ethnic group over religion not only relegates Islam to a secondary place, but this position also engenders a sense of trans-national identity quite at odds with nationalism: they place themselves apart both regionally and religiously. This gives impetus to the idea of looking at the Berber in the period prior to Islam, prior to their de jure (in Islamic terms) status as part of that community which might identify some Berber characteristics typical of this people which sets them so much apart from their fellow North Africans.

**Conclusion**

Ghambou’s perspective on the Latins and Greeks in North Africa’s ancient history aside, he nevertheless accurately identifies the difficulties in uncovering accurate accounts of early Berber history. The troubling concept of finding accounts sufficiently ‘venerable’ to challenge Islamic-Arab hermeneutics compounds the problem, and isn’t helped by the continued scant archaeological findings in the area. Should recent archaeological science not prove equal to that task, it would be difficult to conceive of a more robust alternative in defining the region’s pre-Islamic history. Ghambou’s additional point about Berber identity is also well taken: that it is unique to the Berber and that though Islam may be a component of that identity, Islam by no means defines the Berber. Berber identity, as with any ethnic identity, has been accrued over time and circumstance, the aliquot of cumulative events as perceived by the Berber themselves, and cannot be subject to artificial boundaries imposed from the outside - religious or otherwise.

The Berber have been exposed to a number of different religions over time, molding each to their own purposes: ancient Egypt’s Ammon became for them Amon Zeus, Donatism
was transformed from early Christianity, and maraboutism melded existing religious concepts to an incoming Islam. As with any ethnicity, the Berber have repeatedly molded religion to their needs, nor should we expect otherwise from that facet of culture (religion) which inevitably reflects not only the group’s entire history, cultural values, behaviors, and practices, but also defines the individual’s sense of self-identification as part of that whole.
CHAPTER 2
EARLY BERBER HISTORY AND CONQUESTS

The geography of North African, separated from the continent’s interior by desert to the south and east, and readily accessible by sea, destined North African tribes to have a key role in Mediterranean history. The consequence of successive early colonial settlements on these tribes had severe socio-economic and cultural repercussions to native tribes, each colonizing force differing in impact. This chapter covers the early history of North Africa, the impetus of colonization by Phoenician, Greek and Roman forces and the consequence of successive colonization on the indigenous Berber tribes, with Roman settlement seen as having had the most profound effects.

The Greeks and Libya

When mount Thira\(^1\) erupted in about 1620 BC a severe climate change ensured, wreaking havoc throughout the Mediterranean. From geologic data we now know that it was felt well beyond\(^2,3\) the Mediterranean, plunging an area of some 300,000 square kilometers was into a night of volcanic pumice and ash, and causing a precipitous climate change. The sheer volume of debris is estimated to have been in close to 13 cubic kilometers, with the most significant being deposited within 200 kilometers of Thira. North Africa would have been well within that range. Tsunamis followed throughout the Mediterranean basin, causing populations within

\(^{1}\) Thera is known today as the island of Santorini in the Greek Cyclades.


reach to clamber for higher ground. Soon to follow was an immense output of pyroclastic flow. Swelling seas and floods ensued, ravaging the entire littoral. All told, the violence was so catastrophic and extensive that long-term climatic cooling ensued.

Among the first to fall prey to the Thira’s cataclysm would have been neighboring Crete, not 160 kilometers to the southwest and some estimate that this event might have so debilitated Crete as to have been a significant contributor to the Minoan civilization’s sudden and inexplicable decline and later Mycenaean conquest. For years following the eruption the Cretan crop output was significantly changed, resulting in uncharacteristically long, wet summers. Immense crop failure and depleted grain stores eventually led to famine which in turn caused populations to mobilize in search of new food sources.

Though the island was later resettled, drought struck again in the 7th century BC. Herodotus tells how Delphi was consulted, and following the oracle’s advice a party was sent to colonize Libya at Cyrene. This and other methods, such as ostracism, were common administrative measures used by the Greeks to reduce surfeit populations and prevent social upheaval. Ultimately, though, the goal was to establish satellite cities (poleis) surrounding the Mediterranean, of paramount importance to the mother city-state, Athens. The Thiraeans colony at Cyrene later grew to be one in the constellation of city-states to supply the trade machine of the Hellenic city-state system.

The catastrophic natural disasters in the second millennium BC indirectly caused much of the Greek colonization around the Mediterranean and ultimately that of Libya. Sometime after the major geologic event, mainland Greece had begun to outgrow the capacity of her already meager agricultural resources and resorted to repopulation. Fifteen years and three oracular
visits later⁴, Cyrene was eventually founded and soon began to flourish as yet another colony in an arc about the Mediterranean “like ants or frogs about a marsh⁵.

Though Cyrene was to become a bulwark of shipping commerce in Athens’ sphere of poleis, survival for the new colony did not come easily. They had first to discover Jebel Akhdar (639 BC⁶), an arable plateau more accessible by sea than land but surrounded by desert. The Libyan tribes (mod. Berber) led the settlers to Euhesperides (mod. Benghazi), away from the original settlement, to prevent interest in their own valuable grazing lands. Fage tells us that in 631 BC it was the local Giligamai tribe, who caused Battos, the Thiraean leader, to settle further west of Aziris (unidentified) in a deliberate attempt to place the Greeks in the area of the Asby-stai tribe, in an apparent attempt to keep the Greeks away from their own “ceremonial” site of Irasa (Erasem?).⁷ Herodotus tells us that the Libyans led the Greeks away from Aziris, the initial

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⁴ Scott Buchanan, ed., *The Portable Plato* (Middlesex [Engl]: Penguin Books, 1986), 267. The person chosen for the expedition was Battus, who was to take with him 3 (boats with 100 oars). The colony was eventually successful, but it wasn’t until a third consultation with the Oracle that they eventually succeeded in attaining landfall on the African continent, for according to Herodotus, on two prior occasions they remained offshore on the island of Phaedra trying in vain to sustain themselves there. The had been eking out an existence on the mainland for about 6 years when the local Libyans advised them to move camp to the “place where the clouds are pierced” (Herodotus, Bk IV) which we know today as Benghazi, and which over time became the southernmost port in the Greek world of that time.

⁵ Socrates explains to Simmias where Greece lies on the earth “Also I believe that the earth is very vast, and that we who dwell in the region extending from the river Phasis to the Pillars of Heracles inhabit a small portion only about the sea, like ants or frogs about a marsh, and that there are other inhabitants of many other like places; for everywhere on the face of the earth there are hollows of various forms and sizes, into which the water and the mist and the lower air collect.”


⁷ Ibid., 108.
settlement, to one where “rain that falls like a pierced cloud”\(^8,9\) but did so under cover of night presumably so the Greeks would not catch sight of a “ceremonial” site of great importance to that tribe.

Whatever the reasons of their forebears for leading the Greeks to Euhesperides, Libyans would later incorporate into Cyrenaica and in doing so ultimately took over the pre-exiting Greek state structure together with established Greek trade routes and commerce. This foothold in the Mediterranean economy would help to ensure the colony’s success, providing sufficient agricultural surpluses were maintained. On the heels of the initial colony followed the neighboring cities of, Ptolemais/Tolmeta, Taucheira/Tocra, Barce/El Merj, and Euhesperides/Benghazi, connected to the outside world through the port city of by Apollonia/Marsa Susa,\(^10\) and together forming the ancient Greek pentapoleis.

Despite Cyrene’s proximity Egypt, North Africa was a natural extension of the Aegean islands and since no “strong, organized indigenous society” existed, the Libyans were easily pushed aside by the incoming Greek colonists making Cyrene one of the Greece’s many “new states established by Greek and Phoenician immigrants”\(^11\). The colony’s western expansion was blocked by Carthage. Covetous of her east-west monopoly from Tyr to Iberia, France, and Sicily, Carthage would not have countenanced sharing her well-established trade routes with such an


\(^11\) Ibid., 107.
upstart, particularly one with such close ties with the Egypt through Athens. As Fage points out, the pattern shows Greek interests were agriculture and colonization, not commercial like the Greek holding in Naucratis, Egypt.

The Libyans viewed the increased settlements with some concern, and in 515 BC when a Spartan settlement arrived at Wadi Tarygrad/Kinyps, just west of Cyrene, the Spartans were expelled by a concerted alliance of the Libyan Makai tribe and Phoenicians from Carthage. We know from Herodotus of “unfulfilled oracles for settlement in Djerba/Phla, around lake Tritonis/Gulf of Gabès”, and the fighting that ensued between Phoenicians and Greeks about further settlement was finally resolved by “forging a boundary at Sidra/Gulf of Sirtis (Sirte) at the Alters of Philainos.”

Later Cyrene rulers were backward and autocratic and in another colonization incident this deficiency was to become apparent. During the reign of Battos III (c. 583 BC) Cyrene had been capitalizing on the much-prized *silphium* (*silphion*) herb, a key Mediterranean trade commodity and primary to the colony’s success. But it was the Libyans who held the monopoly on the plant, keeping its source secret. Due on large part to the silphium export, the colony became increasingly successful and the Cyrenaeans invited new Greek settlers with the promise of land:

12. Ibid., 110. Ties with Egypt through Greece included the Egyptian city of Naucratis.

13. Ibid. Fage is referring here to the ancient Greek settlement at Naucratis, Egypt.


15. Ibid.
First, there was the difficulty of integrating the newcomers with the descendants of the original Theraean settlers. Second, and had to be taken from the local Libyans, the Asby-stai, to provide for the new settlers.  

The Libyans viewed further colonization as an unmitigated threat and countered by asking King Wahibre of Egypt for help. The Egyptians responded, but the consequences were disastrous and the Egyptians soundly defeated at Irasa (c.570 BC). Not only were the Greeks victorious, but the offshoot of Cyrenaean victory was a further extension of their fortifications, the pyrgoi, as agricultural settlements to the east of Cyrenaica. These settlements were actually Libyan inventions used as stop-over points in their transhumant migrations across the desert plateaus.

By 583 BC Cyrene's Battos III's constitutional reforms had been put in place due to "royal excesses" and real power now lay with the council and citizen élite. Libyan tribes mostly remained at a distance from the poleis, retaining their transhumant existence with contact with the Greeks only for trade purposes. After Herodotus little was recorded about Cyrene, presumably because the city was of insufficient Hellenic regional importance. There were records, however, of continued clashes between the Greeks and local tribes: In 413 BC at Euhesperides, in

16. Ibid., 110-111

17. Ibid., 111, 151-154.

18. David J. Mattingly, ed. *The Archaeology of Fazzan*: Vol. 1 (London: Synthesis, 2003), 151-154. Located in the Fezzan, the pyrgoi are fortified tower-like structures that imply dual function as defence of water supply and storage (repository) for non-potable goods; Diodorus suggests are water storage towers and are located at water sources (oases) 3:49; ; located in pre-desert valley and desert oases.


the 4th and 3rd century BC against the Nasamones and the Makai, and in 392-380 BC they clashed with king Hakor of Egypt. When Alexander the Great arrived from his pilgrimage to Siwa (mod. Siwa, Egypt) in 322 BC, however, no evidence of disruption was found and the city gates were thrown open to him. But under Ptolemy control was less enthusiastically received by Cyrene and he assigned one of this generals, to govern Cyrene under whom the pentapoleis thrived, though Cyrenaica continued to provoke the Libyan tribes.  

**Cyrene and the Pentapoleis**

After founding Cyrenaica in early 7th century BC, the colony quickly expanded into the pentapoleis of Barce, Euhesperides, Teuchira and Apollonia. Unlike Punic settlements the Greek city states had a tendency to compete amongst each other, and when in the late 6th century BC, Cyrus of Persia began moving west following his conquest of Egypt, Cyrenaica hadn’t the collective fortitude to withstand him. It wasn’t until Alexander returned in 331 BC that Greek rule was re-established, and was to remain until Roman rule in 74 BC.

Both Tripolitania and Cyrenaica lay peaceful and prosperous in Roman hands for 400 years, each region retaining the distinctive flavor of the first Greek settlers. Tripolitans continued to favor trade with the Garamantes, a wealthy Berber people whose trade affiliations penetrated well into the Niger region of Africa, west to Mauretania and east to Egypt. The Garamantes traded in precious metals, ivory and slaves, without which Rome would have suffered for lack of luxury goods. Meanwhile, Cyrenaica’s trade contributions were more Greek in flavor: art and agriculture, exportation of wine and livestock, sillium, and intellectual and poetic works like that of Callimachus.

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In the events that led up to Quietus (Kitos)\textsuperscript{22} revolts of AD 155-116, the Jews of Cyrene revolted and “massacred the Greek population. Greek refugees from Cyrenaeans fled to Egypt, where they instigated a retaliatory massacre of the Jew of Alexandria.”\textsuperscript{23} The revolt eventually spread to Mesopotamia and Cyprus before abating. Fage pinpoints the origin of the Jewish revolts in Alexandria in AD 38, all being were connected both with Jewish privileges under Roman rule and subsequently to Jewish nationalist opposition against the Romans\textsuperscript{24}. Cyrene’s Greek population was completely decimated and the city badly damaged but was later repopulated and rebuilt under the Emperor Hadrian, but never again regained its former economic wealth.\textsuperscript{25}

Of note here is the city of Syrtis, a place Herodotus describes as where the famous silphium was grown, extending “all the way from Platea to the mouth of the Syrtis”\textsuperscript{26} and known today as Sirte, and which was a reconnaissance point from caravans arriving from central Africa. Much later, under Ottoman rule, the area around Sirte was offered by the Turks to tribes of southern Tunisia as an alternative to returning to Tunisia after the arrival of the French. The area has long been under the control of the Sanusi tribe, particularly at Nawfaliyya, where in 1912

\begin{itemize}
\item \textsuperscript{22}The Quietus, or Kitos revolts were begun by Judaic Jews in AD 66 but spread throughout the Roman world. The Berber-born Roman general Lucius Quietus suppressed these rebellions in which Jewish rebels were slaughtering and ransacking cities. Cyrene was one of the cities where these rebellions occurred.
\item \textsuperscript{23}J.D. Fage, \textit{The Cambridge History of Africa} (New York: Cambridge, 1978), 196.
\item \textsuperscript{24}Ibid., 196.
\item \textsuperscript{25}Ibid., 198.
\item \textsuperscript{26}Aubrey de Sélincourt, trans. \textit{Herodotus, The Histories} (New York: Penguin, 2003) 299. The now extinct plant was a major export resource for the ancient Greeks of Cyrene which they did not grow themselves but which they obtained by commerce from the Libyans.
\end{itemize}
they held substantial tribal control and influence and is the homeland of former Libyan leader Mu’ammar al-Qadhafi27.

**Carthage - early history**

Carthage’s history is equally suspect since all primary source material is either Greek or Roman and will have the same faulty aperçu as found in accounts of the Berber. Any Carthaginian accounts were long since lost when their libraries were removed just as Carthage fell. Of what did survive almost none is in Punic script, but Mago’s work on agriculture and Hanno on navigation were later reworked by Roman authors, surviving Carthage’s burn in old Berber cities settled by Punic refugees. Later Berber élite were mostly Latin-speaking and such records lay wasting before eventually being discarded. The ultimate irony of the Phoenician historical accounts lying waste was that they Phoenicians were the progenitors of all Mediterranean writing systems, provided letters to Berber, Greek and later Roman writing system.

**Berber history from various sources**

By Greek and Roman accounts the Berber were thought to be stock-raisers and pastoralists, also engaging in agriculture. But with evidence from either source being scant the conclusion is that the Berber kept “themselves to themselves” and were very likely well adapted to the terrain by a mixed economy of crops and animal husbandry.28 That the Berber had substantial settlements prior to outside involvement we know from accounts of the Berber kingdoms at Iol on the coast, known to the Romans as Caesarea and today as Cherchell. Most of the Berber

strongholds were inland, safer from the later Roman incursions but which retained their original Libyan names: Volubilis, Cirta (Constantine), Siga, Zama, Thugga. 29

The Berber had particular building adaptations we know from the prevalence of castella which are to be found on hilltop promontories across the continent from Morocco to the Libyan Fezzan, and pyrgoi and turres, tower-like structures which were likely built to house surplus grains30 and later used to great advantage by the Greeks31.

They are known to have practiced transhumance (and still do), moving herds from summer to winter pasture, sometimes involving 100 to 200 kilometers displacement to circumvent existing settled agriculture. The vertical displacement involved in this exercise, up the vast distances to the mountains on the High Plains, helps to explain the vast and amorphous boundaries of the ancient Berber kingdoms.32 Raven claims that this transhumance may explain some of the early rebellions and uprisings during the Roman occupation as Berber herders came into contact with their ‘settled’ kin:

They are part of the perennial friction between ‘the desert and the sown’, between shepherds and farmers competing for the same land, or squabbling because the settled try to clock the transhumants’ immemorial routes between summer and winter grazing grounds, since livestock may eat or trample the farmers’ crops before they are harvested.33

29. Ibid., 12
30. Ibid., 13
31. Ibid.
32. Ibid.
33. Ibid.
While each tribe might be at odds with the other, they are also co-dependent, with the herder needing the farmers’ grain as much as the farmer needed the milk, meat, leather, wool, and even the seasonal labor of the herder during the annual harvest. Much of these rhythms are still seen today and it is postulated that ancient Numidian and Moorish tribes might have contained both settled and transhumant components, or perhaps alliances were formed between tribes of each primary type.\textsuperscript{34} Both of these possibilities are reflected in today’s Tuareg:

No one can be sure what was the pattern in North Africa except that it must have varied. No doubt sometimes livestock were raised and crops grown side by side in one area by the same tribe. By and large, however, transhumance would have been essential to keep the animals alive. And it is possible that the kind of noble-and-client clans observed in modern times and the nomadic Tuareg and the settled populations of the Sahara oases\textsuperscript{35} had been a precedent in the tribal structure in north-west Africa in Carthaginian and Roman times. Herodotus (IV, 172) appears to be describing such an arrangement in the fifth century BC when he writes of the relationship between the nomadic Nasamones and the inhabitants of the oasis of Augila.\textsuperscript{36}

With tribal associations such as these together with the corresponding large tracts of land involved in such associations it becomes evident that any disagreements would result in far-reaching consequences and might go a long way in explaining the disappearance and reappearance of Berber tribal names in antiquity. As chieftains shifted alliances there would have been shifts involving not only tribes but entire tribal federations together with the transfer of enormous

\textsuperscript{34} Ibid., 14.
\textsuperscript{35} Ibid. Raven explains that prior to the French colonization of Algeria certain nomads, led by their sheikhs and caïds (a Berber chieftain, judge, or senior official, or master) helped protect their fellow tribesmen-farmers against enemies.
\textsuperscript{36} Ibid.
tracks of land. A recent example of this behavior is the 20th century Sheik El Glaoui37 of the Moroccan Atlas, a man who better represents the type of ‘king’ of the Carthaginian and Roman period where huge expanses of land, herders and other settled areas would be under the jurisdiction of a single ruler whose domain covers many tribes with shifting terrains. Raven points to the difference between this arrangement and the European feudal system though that too had tribal components and shifting alliances.38

The Berber script, known today through the Tuareg as ti-finagh, is Phoenician in origin and used by the Tuareg in daily transactions even today. An alphabet of consonants with implied vowels, it appears to have first surfaced before the 4th century BC39 and the related Punic-derived cursive script would have been used for official transcripts and daily purposes. Use of the cursive would have been widespread, whereas the less elaborate Berber script was better adapted to epigraphy and is still visible today on stone carvings. The ancient cursive script once used from the Canaries in Morocco to the Fezzan (Libya) and has recently been revived in Algeria’s Kabyle region and the epigraphs have been instrumental in helping to decipher Berber civic

37. Thami El Mezouari El Glaoui, (b. 1879, d. 1956), was a famous Moroccan pasha and chieftain of the Glaoua tribe who allied himself with the French and was instrumental in the overthrow of Sultan Mohamed V. El Glaoui’s ties to his tribespeople, unavailable to the Sultan by virtue of the very isolation of his position, is what drove the success of the venture.

38. Though Raven claims these two systems are not synonymous, one has but the recall the tribal involvement in the Second Jacobite Rebellion and the Battle Culloden in 1746, where without the alliance of Scotland’s clans and chieftains the Rebellion wouldn’t have taken place.

institutions of the day.\textsuperscript{40} One such inscription describes a post-Carthaginian controlled stronghold at Thugga (Dougga, Tunisia), under the control of either Masinissa or his son Micipsa which puts it at about 120 BC. From these inscriptions it was surmised that Berber kings of old were chosen in much the same way as modern Berber chieftains - by rotating the titular positions “through the principal families of the town”, with the élite maintaining a persistent stronghold in the community. There can be little credence given to the thought that these, and other subordinate positions, were Punic in origin since no direct Punic translation is provided on the epigraphs. Instead a transliteration of the Berber is engraved, and as already mentioned, by this time these populations would have been Punic-Berber bilingual. Other period towns would have been administered in much the same way as Punic sufetes, and higher administrative positions would have been held by members of the royal household.\textsuperscript{41} By 138 BC the breadth of use of the Berber script was in extensive use even in rural communities in the Algerian-Tunisian hinterlands, replacing the existing Punic in daily expression. Even today the script is plainly visible on ancient tombs and is thought to have been used by both Roman and Carthaginian North Africans.

\textit{Punic and Roman influence}

Because of potential Roman and Greek bias due to political competition during Sicilian and Punic campaigns, it comes as no surprise that materials found recently on the site of old Carthage sometimes conflict with Greek and Roman accounts of the period:

\begin{quote}
\textsuperscript{40} Ibid., 37.
\textsuperscript{41} Ibid., 40.
\end{quote}
There are no contemporary records of the establishment of the Phoenician and Greek settlements in northern Africa. The history of Phoenician and Greek colonization has to be reconstructed on the basis of archaeological evidence and traditions recorded later by Greek and Roman historians. The literature of the Phoenicians themselves is lost, and Phoenician traditions survive only in so far as they are reported by Greek writers.  

While Philistos of Syracuse dates the founding of Carthage 1215 BC, Eratosthenes dates it earlier still, at about fifty (50) years prior to the Trojan War (1210 - 1190 BC), other accounts place the date about 840 BC. Most though, appear to agree that if was founded by Dido of Tyre, fleeing her brother Pygmalion, who was granted land to found her city by a Libyan tribal king. Myth and legend aside, the primary purpose of the Phoenician ports was for victualing and watering for ships travelling the 3,200 kilometers from Tartassus (Spain) to Tyre. Ships at the time could travel no more than about 48 kilometers per day and were further restricted in the winter months due to the Mediterranean’s tendency for sudden storms, most acute in November to March. These ships brought raw metals from Spain and Britain, to sate the constant demand from the eastern Mediterranean. The Phoenicians chose the ports for their isolation from the interior, for their relative good harboring, and provided them with only a small ‘settled’ population. The idea was to enhance the trade traffic and not until much later, when Tyre fell to Babylon, did any of the Phoenician ports expand their population of émigrés from Tyre, and even after Carthage was established, she continued to send homage to the mother city. By the 6th c.  

42. J.D. Fage, *The Cambridge History of Africa*, 691.
45. Ibid., 10.
BC, the populations in the Carthaginian ports of Mogador (Morocco), Tipaza (Algeria), and Hydramatum (Sousse, Tunisia) increased significantly causing Carthage to increase in regional importance. Never, though, did the Phoenicians have the population and manpower to vie with Rome. Throughout history Carthage was to rely on the local Berber populations to supply her armies, a choice which may have led to her ultimate demise but which certainly enhanced the Berber monopoly in the continent’s interior.46

By the 320’s BC the single largest element of the Carthaginian army was composed of Berber mercenaries, and from 241 to 238 B.C., during the Revolt of the Mercenaries, it was the Berber soldiers who rebelled and subsequently obtained control of much of Carthage's North African territory, and who then minted coins bearing the name Libyan. After the third and final Punic War, Carthage's decline accelerated and finally in 146 BC she fell to Rome and was burnt to the ground. But in the years leading to her decline, the Berber leaders had not lain idle. As Carthage waned they moved to fill the power vacuum, slowly gaining in strength and influence and by the 2nd century BC the Berber kingdoms had emerged.47 The first of these lay just beyond Carthage's coastal areas while the second, Mauretania, took form to the west, bordering the Atlantic and covering roughly what is now Morocco. King Masinissa (c. 150 BC) exemplifies the height of Berber power to have emerged, and following his death the Berber kingdoms changed in style of leadership and territorial, finally ceding power to Rome in AD 24. Even the Numidian

46. Ibid.

coinage during this era reflected the anti-Carthage (and therefore pro-Greek) aspect, with buildings such that the third century BC tomb at Medracen (Aurès Mountains, Algeria) reflecting the Hellenic style of Alexander’s tomb at Alexandria (Egypt).

When Rome finally took possession of North Africa a fundamental change took place in the governance and administration of the ‘province’ which may be key in understanding the impact Rome had on the indigenous Berber civitas. As a result of Roman governance and general Romanization it can be assumed that at least some influence might have carried forward in the Berber identify described by Ghabou as being ‘pre-Islamic’ (see chapter 1). But is there a vestigial Berber sociological component element which predates even the Roman occupation?

Prior to Rome’s foothold in Africa the Berber had already succumbed to the trade influences simply by virtue of their location in the Mediterranean. The Sea itself was the inevitable purveyor of outside influence to North Africa just as the Sahara below had been that which, to a great extent, isolated the Berber from below. The initial influence had been Punic, then Greek but not Roman until Carthage had fallen. From the seventh century BC, when Punic settlements first dotted the North African coast, the penetration of that culture made some significant inroads into Berber society not only through trade and commerce but also through tribute and labor, reaching far beyond the footprint of the settlements themselves. Greek settlement dates to about the same period as the Punic but was less trade-oriented and more concerned, as were all Greek colonies, with repopulation of Greeks and land acquisition for agriculture. Inevitably, the influence of Carthage and Cyrene would change the Berber economy and sociology but neither would have the impact of Rome’s conquest for a number of reasons: Centuriation, with huge tracts of land appropriated from the Berber population for Rome’s veterans, imperial land tract
appropriation for Rome’s own use, the imposition of the Roman judicial system, the institution of towns and cities, and many more.

It is outside the scope of this paper to look at all of these but since we are primarily looking for Berber reactivity it might be appropriate to look at that aspect of Berber behaviour, or what we know of it, during ancient times by looking at the ‘linkages’ between the Punic settlers and the Berber from the 7th c. BC, that is to look at the ‘social preconditions’ to Romanization of North Africa centuries pre- and post-Romanization. Essentially, looking for clues in the influences expressed in the culture of those times and how much of that ‘foreign’ culture was absorbed by the Berber.48

**Berber social structure**

Berber town structure in 2nd century BC was similar to what would have been seen in other parts of the Mediterranean, being mostly Punic in character with some were more Numidian and some more Mauretanian. Coastal town élites in Punic settlements such as Kerkouane (Cape Bon, Tunisia) and Lixus (Morocco) were decidedly Punic in culture whereas further inland towns élites of the Mauri, Libyan and Numidians bore the “Hellenistic overlay” resulting from when Masinissa’s son, Micipsa, set up a Greek colony at the Numidian capital, Cirta (Constantine, Algeria).49,50


Culture was further influenced by the ruling élites willingness and ability to move between different cultures being bi- and sometimes tri-lingual (Berber, Greek, Punic), and incorporating each hegemonic cultures into their own. This culture was maintained in place by the Berber monarch in order to properly “emulate’ in the style of the idealized Greek monarch with his retinue of courtiers and aristocrats necessary to properly “organize the nascent state and its armies” and which would later transform local “chieftains” to “princes”.51

The effect of the Berber élites their subordinate population is important in order to demonstrate the extent to which that influence might have carried forward in time. Looking at Gellner’s52 model of social relationships in agrarian societies we see that the Berber élites of that era were closely tied to other élites, but culturally differentiated from the agrarian society subordinate to them and yet to which were in turn also tied.53 Of equal note was the isolation of the peasant/agrarian Berber society which like all peasants was fixed in place, yet contrasted with the Berber mercenary whose positions in Numidian army linked to the larger economy:

In contrast to the strong horizontal bonds of the elites, the isolation of these small, enclosed communities was increased by the lack of effective markets or communications. The one exception to this rule must have been the service of the men as mercenaries or recruits into the Numidian armies, which represented their sole direct link to the outside world.54

The Berber village

54. Ibid., 22.
Prior to Roman occupation the Berber village had seen little impact from the outside world. There were influences brought about by mercenaries recruited by the Punics as well as the influence from trading of surpluses required as the considerable in-kind tribute by the Punics. But that was only later. Initially, it was the Berber tribes who exacted payment from the Carthaginians and provided the latter with trade resources from the African interior. But the influence from both Greek and Punic settlers was of such long duration that effects on the Berber were inevitable, and some degree acculturation followed, depending on in extent to a community’s physical proximity or remove from the hegemonic power. But it was under Roman rule that the most significant change took place at the village level, due primarily to the intensification of agriculture brought about by the “Mediterranean-wide market” engendered by pax romana.\textsuperscript{55} There was also the far-reaching change incurred as a result of the shift from the typical Berber holding of land in common to the Roman concept of individual property ownership which, as Fentress points out, could be accomplished in a number of ways even by the Berber:

Exactly how any individual moved from the collective holdings of his family to a private estate is something we cannot know about, although individual grants, marriage to an heir of someone with a grant, straightforward appropriation of collective property and purchase with money earned from military service are all possibilities.

Mancian Tenures were another Roman innovation to encourage agriculture. Peasants were encouraged to plant uncultivated areas with olives and vines which resulted not only in surpluses but also in the establishment of possessores\textsuperscript{56}. No longer linked to their ‘in common’ kinship


\textsuperscript{56} In ancient Rome, those who controlled most of the public land.
holdings, peasants were instead tethered to large either imperial (or other) estates. Overall this would have resulted in the diminishing the original tribal lands and replaced by individual "peasant farmsteads"\textsuperscript{57}, reaching from the littoral areas developed under Punic rule to:

...the more marginal lands of the pre-desert, where intensive labour on irrigation was required to make farming possible. The great boom in settlement in the pre-desert areas such as Kasserine dates from the third and fourth centuries rather than from the second, showing a gradual spread by individual farmers onto more marginal areas, away from the earlier centres of tribal concentration.\textsuperscript{58}

Villagers adapted to a new ‘municipal setting’ when moving from village to urban sites with serious effects on social structure as mingling of different classes (citizens and civitas) occurred, each with their own judicial systems and sometimes with combination changes sufficient to elicit outright revolts. Just such a revolt occurred in 17-24 AD, led by Tacfarinas of the Musulamii and though the matter was resolved in their favor, the Musulamii demands were not met for another two generations.\textsuperscript{59}

The traditional Berber mixed economy would have been replaced as the kinship farm-lands were taken over for intensive wheat and olive cultivation. Where once there were grazing pastures, available land and labor was pressed into the service of the empire, the now less use-

\textsuperscript{57} Elizabeth Fentress, “Romanizing the Berbers,” \textit{Past & Present}, no. 190 (February 2006): 27.

\textsuperscript{58} Ibid., 27

\textsuperscript{59} Ibid., 29. The Musulamii (17-24 AD) having joined with the Gaetulians and Cinithians from Giddis and led by the Roman veteran Tacfarinas, rebelled and demanded a land grant (sedes and concessio agrorum), thereby demonstrating the threat they perceived due to the continuous encroachments of large private estates in the area of their settlements. See: Fentress (2006, 29)
ful grazing animals and their attendants moved to the high steppe to engage in nomadic pastoralism.\(^{60}\) Interestingly, the very mobility of the nomads so summarily dispatched by Roman occupation to engage in this highly specialized form of stock-raising, was later to became a key threat to the Empire because these tribesmen could no longer be controlled.

Large farms with the attendant large labor forces also had large numbers of poor, sick and destitute as families became separated from their villages and kin groups, creating a marginalized rural society. Able bodied individuals would have fled to towns or joined the army, in either case changing the individual’s “frame of reference” to kin, family and tribe, and the land itself ceased to hold the same significance. What followed was the “the replacement of traditional embedded exchange networks with the large-scale markets of the empire, and traditional systems of military and social prestige with the transparent, but socially impoverished, criterion of wealth.”\(^{61}\) The net effect for the Roman economy was to produce extraordinary riches for the few at the cost of misery for those on the margins, recently disenfranchised of their land.

Not all the influence lay with Rome, there were the Greeks and Punics who at least began the “capillary penetration”\(^{62}\), and North Africa’s market ought eventually to have opened to the wider Mediterranean market if only due to its proximity to Egypt and its relative isolation to the south by the Sahara. This geographic isolation from the south east is, more than any other factor, was what reinforced North Africa’s connection with the Mediterranean sphere. This


\(^{61}\) Ibid., 30.

\(^{62}\) Ibid., 31
physical connectedness would result in all primary influences coming from that direction. It was no longer a question of the Berber to have remained untouched by foreign influences if they would have evolved any advanced political or social organization... or that without ‘civilizing’ effects they would have remained in isolation due to being “emotionally intense but individualistic and without power to cooperate in large groups” and “unoriginal and appear to have had little capacity for self-development.” Rather the point is that it would have been impossible for globalization not to have reached the Berber during the Punic, Greek and Roman incursions and that the effect of these outside influences was not binary, but a matter of degree. The degree of outside influence, or acculturation of the Berber is important not in itself but as an indicator of change itself. Assuming proximity to foreign presence during these ancient times infers greater influence the idea here is to determine the degree of isolation of the Berber and the degree of foreign cultural penetration. In this way it would be easier to pinpoint areas of maximum and minimum penetration and hence what ‘original ’or indigenous Berber cultural traits and characteristics might be carried forward in time.

What is most important to look at here are the factors the Berber had to contend with as a result of this transformation and what became of them in the aftermath of these myriad and profound changes to their culture and way of life. The effect of foreign colonization, of land expropriation held as a kin group, of the dislocation of family and kinship groups, of centuria-

64. Ibid., 6.
tion, of the enforcement of Roman law above indigenous laws, of the Roman cadastral arrangements, of Roman political structures and of government above what they already had in place, all these had cumulative effect on the Berber psyche.

Results of the cultural incursion were no less dramatic. Though the fifty percent (50%) tribute exacted under Carthage may compare favorably with what later Rome collected, and whereas both Rome and Carthage forced tribute in the form of recruits, the economic penetration of the market caused by taxation and trade appears greater under Roman rule than under the Punic system, added to which:

...the political structures of Roman government, with all land controlled, eventually, by the municipia. Roman rule transformed a loosely bonded and heterogeneous landscape and its people into a remarkably uniform series of towns, whose urban furniture was as predictable as their social structures. Berber languages all but disappeared in the process: there is no trace of Libyan epigraphy after the third century. The mechanisms of these transformations were complex, but hardly dependent on the choices of the local elites alone.65

However, Punic influence on the Berber following the defeat at Himera (480 BC) cannot be underestimated, and the sudden impact on the Carthage area economy of losing Sicily and Sardinia must have had been far-reaching. The Greeks had succeeded in significantly disrupting Carthaginian trade, the treasury reserves lay immobilized, and more importantly to future developments, the city’s population now had to resort to the hinterlands for their foodstuffs, thereby transforming their relationship with the Berber population.

From the time of Himera until Carthage was defeated in 146 BC there were three hundred and thirty-four (334) years of Punic involvement in the African interior. The traditional

date for Carthage’s founding is 814 BC\(^{66}\) and making the subtraction from the data she fell (146 BC) we have six hundred and sixty-eight (668) years during which she was not significantly involved in the African interior, but primarily traded along the coast and engaged the Berber only incidentally. Of her total involvement of about 668 years, therefore, only half of that time was more intimately involved with the Berber economically and culturally. Crawley asserts that in the case of the Carthage’s *chora*\(^{67}\), archaeological surveys of the area show few actual settlement sites: nine (9) sites from the 4th c. BC, and only fifty (50) by the time of the 3rd and 2nd centuries (BC).\(^{68}\) Even at Carthage itself, Punic settlements appear not to have penetrated very far into the continent’s interior. By contrast, looking at Rome’s involvement beginning when she took Carthage in 146 BC and extending to her own fall in approximately 476 AD, the period of influence is approximately six hundred and twenty-two (622) years, almost twice influence time spent under Carthage.

Mattingly (2011) has a different view of the Empire’s North African influence. He shows the Roman influence in Carthage to extend from the 2nd c. BC to the 2nd c. AD after which the Roman presence was so diminished as to amount to a single legion in Africa Proconsularis.\(^{69}\) For


\(^{68}\) Josephine Crawley Quinn “Roman Africa?,” 11

the first portion of the Roman domination, however, his demarcation for the sphere of influence is distinctly north-south, beginning at about Tabarka, Tunisia (latitude/longitude (36.956751, 8.747807)) in the north and extending south to about Gabès, Tunisia (33.894357,10.08522), an area roughly corresponding to current day Tunisia. In the second phase of Roman development, corresponding to the 1st c. BC, he extends the influence from about Béjaïa (Algeria) in the north (36.747688, 5.042725) down and along the coast to the about the city of Sirte (Surt, Libya) (31.297328, 16.589355) and picking up again to include all of the Pentapoleis and up to what is today the Libyan border with Egypt. Not included for this time period and which is not reached by Roman influence until the 1st c. AD, is the approximate region between Sirte/Surt and present day Ajdabiya (Libya)( 30.758359, 20.228119). This later 1st c. AD influence extends from the north east at about Tlemcen, just east of the Moroccan-Algerian border and then west in a deep band well into the interior of the continent until it reaches the Egyptian border at about the latitude of the Siwa oasis (Egypt) (29.210612, 25.519466), and picks up again at about Melilla 70(35.342015, -2.953034), and extends south to about Casablanca (33.559707, -7.602539). Only in the 2nd c. AD does the incursion extend into the African interior roughly along what the Empire had already established in the 1st c. AD, but deeper into the interior from Saidia (Morocco)(35.08536, -2.237091) extending west to east about 800 kilometers deep to about the present Egypt-Sudan border. Remarkably, there is a clear swath between about Saidia and Melilla, extending into the interior about 200 kilometers to about the latitude

70. Although on the North African mainland, Melilla today remains a Spanish territory.
of Biskra (Algeria), which appears to have escaped Roman influence and from what was mentioned earlier regarding Punic involvement in the area, would also have escaped any primary Phoenician influence. Mattingly shows that following the 2nd c. AD, what Roman influence there was in North Africa was limited to campaigns, including the relatively untouched area just mentioned. Following the 2nd c. AD the Empire was in withdrawal. The earlier rough estimate of about 600 years has now diminished to about 400, and of that time only 300 years extended beyond Tunisia which corresponds very roughly to what is described above by Crawley-Quinn as the Republican sites uncovered to date.

Perhaps a reasonable comparison between Roman and Punic ‘interior’ influence upon the Berber would be from Himera to Carthage’s fall (480 -146) in the case of the latter, amounting to about 334 years, and for Rome from the 1st c. BC when she began to extend beyond Carthage and the Cape Bon peninsula to when she reached her fullest extent on the continent in the 2nd c. AD, a period amounting to about 300 years. Thus compared the two influences appear to be about equal, but hardly equates with the net effect of acculturation and imprinting might have been involved in dealings with the Berber. Though Rome, according to Fentress (2006), appears to have the upper hand in globalization effects:

Augustan colonies, the intromission of consistent numbers of colonists in many of the indigenous communities, the expropriation of a large — if unquantifiable — amount of land, the application of Roman law, and the demarcation of the Roman cadastral arrangements, all accelerated the process. To the economic penetration of the market caused by taxation and trade were added the political structures of Roman government, with all land controlled, eventually, by the municipia. 72

The municipia, though extremely powerful in the depth and breadth of penetration into societal fabric, were short-lived in North Africa, becoming obsolete in 212 AD. Nevertheless, since the power of the municipia would have been with the local landholding élite, the *decurio*\(^73\), no doubt the transfer of power would have continued along with tax collection for imports and exports and revenue from city lands, a charge the *decurio* would hardly have easily relinquished given their existing hold on local politics and judicial affairs, along with the financial powers. The most long-lasting of effects might have come from the Roman urbanization, some of which is still apparent in North Africa even today.

*Tacfarinas revolts: Roads, recruiting, taxes and census*

The Berber tribes of southern Tunisia, including the Musulamii, Gaetulians and others, had for millennia migrated seasonally from the plains of Constantine to the Tunisian Dorsal in search of forage and water for their herds. Together with the indigenous settled agricultural communities (also Berber) with whom they traded, these migrations constituted the heart of the tribes’ mixed agri-forage economy.\(^74\)

73. Ibid., 22.

When the III Augustan Legion (Legio III Augusta) began constructing the road connecting its headquarters at Ammaedara\(^75\) to the port city of Gabès, the Gaetulians (Libyan Berber) saw the road as a block to their migrations from the Chocs (salt marshes) in the south at the Gulf of Gabès to their northerly destinations, perceiving the road as a complete upheaval of their way of life. The road, some 320 kilometers long and extending from Ammaedara in the northwest to Gabès in the southeast, was monitored from above by soldiers in fortifications placed at regular intervals along its length and with the express purpose of surveying and monitoring tribal activities. Before long other Berber tribes, particularly the Garamantes of Libya’s Fezzan and Nasamones of the Syrctic Gulf (Sirte, Libya), whose very heartlands the road encroached upon, began to view the enterprise with increasing suspicion, running as it did into their heartland along the Jabal Nafusa\(^76\), also cutting them off from the seasonal grazing areas upon which they were dependent.

\(^75\) Ammaedara (mod. Haïdra), was a Roman city in western Tunisia on the Carthage–Théveste trunk road, 36 km. (22 mi.) north-east of the latter. The first fortress of the Legio III Augusta was established here in Augustan times on a virgin site close to the Oued Haïdra. The exact position of the fortress is unknown, but it is assumed to lie under the Byzantine fortress at the heart of the site; legionary tombstones from a necropolis to the east demonstrate the presence of the legion. When the fortress was moved to Théveste c. ad 75, a town was founded as colonia Flavia Augusta Aemeria Ammaedara (Corpus Inscriptionum Latinarum 8. 308). Imposing ruins, including those of a capitolium (see Capitol), a theatre, baths, an arch of Septimius Severus (195), and several mausolea, are spread out over an area of some 1,400×600 m. (1,500×650 yds.), but little excavation has been conducted. Ammaedara was a notable Christian center, with bishops at least from 256 AD. From: Simon Hornblower and Antony Spawforth, eds., *The Oxford Classical Dictionary*, 3rd. rev. ed. Oxford University Press, 2005, under “Ammaedara. http://www.oxfordreference.com/view/10.1093/acref/9780198606413.001.0001/acref-9780198606413-e-360 [accessed July 20, 2013].

\(^76\) The Jabal Nafusa mountain range lies in western Tripolitania, northwestern Libya, and includes the escarpment formed by the intersection of the Tripolitanian plateau meeting the Mediterranean coastal plain, known as the Jafara. Historically, this was the cultural center of the ancient Libu. The Jabal Nafusa mountain range is the heartland of the Nafusi Berber who take their name from these geographic formations.
Though the purpose of the road construction was primarily military, being the provisioning, troop movement and communication purposes of the Legio III Augusta, Rome also saw such roads as indispensable to the proper administration of the state. Economies in regions of the empire with such roads were seen to flourish as commerce was facilitated by easy movement of goods and services between cities. This, however, was not understood by those Berber tribes reliant on migration, who under Greek and Punic influence had seen no disruption to their lifestyle or transformation of the landscape itself.

The Emperor Augustus, mindful of the ever-increasing need to bolster Roman defenses against the incessant marauding of the Garamantes and the Nasamones, had instructed the road be made to ensure better protection of the valuable holdings of Tripolitania, the valuable Roman port city on the Gulf of Sirtis. There had been a number of recent conflicts with the tribes and the Augusta III needed the ready movement of goods from the port to Ammaedara to ensure constant munitions supply as well as soldier reinforcements.77

Hostilities had been building for some time between Rome and the indigenous tribes due not infrequently to mismanagement and corruption of both Roman authorities and of the army, so the Berber complaints were not entirely unwarranted. Libyans found Roman officials to be arrogant and corrupt and military recruiters equally so, but the most egregious of these complaints to the Berber mentality was the concept of Roman land taxation, a concept apparently quite different to what they had experienced under Punic rule:

The Carthaginian subjects paid tributes and taxes, but-perhaps-not the citizens themselves. *At least some of the taxes were paid in kind*, since they were assessed according to the crop-yield... We have only meager evidence on the sums obtained thus (Livy 34.62.3; Polybius 31.21.8).\(^7\)

Wherever possible, they left the local administration in hand(s) of the locals but did not allow them to join their own ranks. The reward for supporting and maintaining Carthaginian rule was meager. The subjects were at least partly protected against threats from the exterior (especially on Sicily), but- of course-they had still to bear a large part of this protection *by paying taxes or getting drafted into the army*.\(^7\)

Just how different the taxation was to what the Berber would have experienced under Punic rule remains difficult to say but the following by Whittaker (2005, 597) explains something of the Roman system in Africa Proconsularis: the Berber would be paying both stipendium and pasture tax, and possibly an additional land appropriation:

> Taxation units and agents of the pre-imperial period persisted – the mixed system established by the Agrarian Law of 111 BC was maintained whereby a fixed sum (stipendium) was imposed on native communities or those with movable properties and a tithe (decuma) on Roman purchasers of former public land. This was in addition to the pasture tax on animals.\(^8\)

But when road construction did begin the tribes erupted in outrage, claiming that such appropriation of their hereditary lands constituted an outright threat to their existence as the indigenous


\(^7\) Ibid., 379.

\(^8\) C.R. Whittaker, “Roman Africa: Augustus to Vespasian,” 597.
people (*gens indigeneus*). Seen from the tribal perspective, the revolt which ensued from the road construction is interesting for a number of reasons.81

Like so many tribal groups, the Berber leaders had frequently been at war among themselves, raiding and looting being part of the tribal system of power equilibrium. For a union to have occurred, therefore, between two belligerent factions such as the Musulamii and Gaetuli, would have meant laying aside past differences to unite more effectively against a greater foe such as that posed by the Roman political and economic machine. It is further indicative of the aversion held by the tribes against Roman incursions and perceived excesses (such as taxation on land) that they were later joined in these revolts by the Garamantes, who though located at considerable distance from the Musulamii, in the region of Théveste82, still made the investment of travelling the distance to enlist in the fight. It may also have been that the Garamantes were incentivized by a former slight from an encounter with the Roman proconsul L. Balbus in 19 BC, and wanted to even the score, but whatever the reason they too decided to join the fray.83

The next bone of contention between the Berber and Roman domination was their deep antipathy against forced recruitment into the military. In addition to the burden of taxation which rankled the Berber considerably, and the appropriation of land, the tribes were also expected to provide a constant supply of recruits for the army auxiliary, thereby supplementing

81. Ibid., 595.


the main body of the Augusta III which numbered roughly 5,000 men, consisting of (10) ten co-
horts of 480 men and their officers. However, unlike the army, auxiliary recruits were com-
posed of local men, usually in their late teens and early twenties who were forcibly removed from the Empire’s indigenous peoples and who, according to Tacitus, numbered about the same as the legionnaires and fought together with them as a single fighting unit:

Then, as appropriate outside Italy, the provincials contributed naval crews, and auxiliary cavalry and infantry. Altogether these were about as numerous as the regular army. But I cannot enumerate them since as circumstances required, they changed stations, or their numbers rose or fell. 84

This practice of forcible recruitment was justified by the Emperor, Tiberius on the grounds that other methods of recruitment had proven ineffective:

...numerous soldiers are due for release and the need to fill their places by conscription. There were not enough volunteers, he said, and they lacked the old bravery and the discipline, since voluntary enlistment mostly attracted penniless vagrants. 85

Among the most valuable of these auxilia recruits were the Mauri Berber of Mauretania, whose light cavalry skills were highly prized. Their reputation was long-standing, having known Rome alternately as friend and foe for over two hundred years. Under King Juba II of Mauretania the auxilia had been regionally indispensable for Rome’s acquisition and sustained control of Maure-
tania. Under Mauretanian control, greater numbers of these valuable horsemen became availa-
ble, and in such unarmed territories, became the de facto Roman military presence.

85. Ibid., 159.
This practice of recruitment was understandably not favored by the Berber who sought to retain this valuable demographic for their own purposes of tribal protection against inter-tribal conflict. But the value to Rome won out of tribal necessity and avid conscription of these superb horsemen into auxiliary cavalry continued unabated.

During this recruitment, other favorable characteristics were found in the Berber population which had long been sought by the Romans in their recruits: It had long been maintained that people of mountainous regions of poor agricultural production such as is found in the Aurès and the Tell made better soldiers then recruits from other areas. Something about the geographical remoteness as well as the isolation in the politico-economic sense better acclimatized them to the hardship of the Roman military career. This phenomenon is explored by C.H. Enloe (1980) and involves populations who are remote from ‘civilization, are encapsulated in the mountain villages, and yet are sufficiently close to historic invasion routes where they would have to have fended off invaders. Finally, such population groups would historically have fought against absorption of their kind into proximal, more advanced states.  

As a member of the powerful Musulamii, a powerful confederation of tribes the ring leader of the revolt who was to prove such a thorn in the empire’s side was just such an auxilia.

86. C.H. Enloe, Ethnic Soldiers: State Security in Divided Societies (Harmondsworth: Penguin, 1980), 23-49. Enloe calls these this combination of characteristics the ‘Gurkha Syndrome’ and cites the Isaurians and the peoples of Roman Pannonia, Noricum, and Dalmatia as epitomizing such recruits.

Tacfarinas was recruited by the Legio III Augusta and duly trained, gaining all the military expertise offered, but later turned this to great advantage against the Legio III. Like so many others who later deserted, he was able to put to good use the expertise he had gained while training in the Roman army, but in his case he also incorporated traditional Berber fighting tactics, a winning combination which insured his success in a revolt which lasting from AD 17-24. During this period he masterminded a continuous revolt against the Rome which brought together not only his tribe of the Musulamii, but also the Garamantes and the Mauri, who were by now rebelling against the annexation by Rome of their native Mauretania. Together with his formidable troops Tacfarinas became a force to be reckoned with and was only put down when the Romans finally employed his own guerilla warfare tactics against him.

In addition to a host of complaints against the Empire, the tribesmen were particularly irked by the notion to of paying homage not only to Juba II, who they viewed as a Roman cipher, and more so to his successor, Ptolemy, recently ascended to the Mauretanian throne, having been educated exclusively in Rome. Such super-kings were seen by the Mauri troops as mere puppets of the Empire. Ptolemy in particular held no candle even to his father in terms of cultural standing and his succession proved sufficient to provoke the tribesmen into rebellion:

Equally provocative, they were probably expected to acknowledge the Roman puppet [king] Juba as their overlord, which gave them common cause for resistance with the western Mauri.

88. C.R. Whitaker earlier explains that not only did the tribesmen saw Juba II as a Roman agent, but they also disinclined to recognize the authority of super-kings. C.R. Whittaker, "Roman Africa: Augustus to Vespasian," 595.

In AD 17 this perfect storm of frustration was unleashed upon the Roman occupation by the Musulamii and Rome learnt to rue the site of Tacfarinas who cost them dearly and whose continued resistance for almost a decade was to be the most important North African event of Tiberius' reign.\(^9\)

The forced recruits of the auxilia, such as Tacfarinas, were not members of the regular army corps. Regulars were recruited solely from Roman citizens, but, as mentioned earlier auxilia were instead recruited locally. They were a mixed conscript volunteer corps serving an average of ten years, whereas the regular legionnaires were for the most part an all-volunteer body of long-term professionals serving a standard twenty-five year term. Augustus had initially set up the auxilia to complement the legion numbers with an approximately equal number of men. However, whereas regular troops were brought in from other parts of the empire, the auxilia were recruited from the local peregrini or non-citizen inhabitants of the empire, who in the 1st century, constituted about 90% of the Empire's population. By AD 212, however, all non-slave inhabitants of the Empire were granted citizenship by the constitutio Antoniniana thereby abolishing the status of peregrinus.\(^1\)

When the revolt continued to be unheeded by Roman officials Tacfarinas decided to make clear what the Berber demands were - the land demands in particular. Here the historian

\(^9\) Paul MacKendrick, *North African Stones Speak* (Chapel Hill: The University of North Carolina Press, 1980), 49. MacKendrick also mentions that the tribes were also frustrated at the Roman policy of forced settlement over transhumance, the traditional way of life.

\(^1\) C.R. Whittaker, “Roman Africa: Augustus to Vespasian,” in *The Cambridge Ancient History*, 595.
Tacitus shows the Emperor’s outrage at what he perceived as Tacfarinas’ utter insolence on behalf of the Berber tribal demands:

Still the career of Blæsus merited such a reward. For Tacfarinas, through often driven back, had recruited his resources in the interior of Africa, and had become so insolent as to send envoys to Tiberius, actually demanding a settlement for himself and his army, or else threatening us with an interminable war. Never, it is said, was the emperor so exasperated by an insult to himself and the Roman people as by a deserter and brigand assuming the character of a belligerent. “Even Spartacus when he had destroyed so many consular armies and was burning Italy with impunity, though the State was staggering under the tremendous wars of Sertorius and Mithridates, had not the offer of an honourable surrender on stipulated conditions; far less, in Rome’s most glorious height of power, should a robber like Tacfarinas be bought off by peace and concessions of territory.”

Africa had been assigned a single legion for policing and defense purposes whereas neighboring Egypt had three. Whittaker\(^{93}\) explains that the role of the Roman military at the time, the very same Legio Augusta III referred to earlier, was more than just peace-keeping. Records show additional roles which may have been grist for further conflict with the North African tribes: Latin inscriptions\(^{94}\) tell of the Legion’s role in the census collecting taxes from forty-four (44) local \textit{civitates} (communities) in the region which, in addition to their other onerous duties, cannot have engendered popularity with the native populace. The Legion was now involved in census-taking

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94. Latin inscriptions refer to the CIL (Corpus Inscriptionum Latinarum)
and supervised by a tribune, which though a junior office was nevertheless one of considerable status in the province:

Although little is known about the tax arrangements, an undated dedication by forty-four *civitates* of Africa to a tribune of the III Augustan legion who had conducted the census shows the hand taken by the military in the operation.

Whittaker (2005, 593) does not elaborate on what is involved in the census but does say that a tribune conducted the census in question which may clarify the impression they wanted to make on the Berber regarding the importance Rome placed on this practice. In linking the army to taxation there was a tacit implication of ready force, otherwise absent under usual tax collection purposes of the period where individuals would collect taxes. In this case, the tribune, a young patrician officer, was nevertheless *sanctus magistratus*, a rank to be reckoned with and of significance to the Berber, and particularly telling given what was at stake at the time and perhaps indicative of Rome’s catering to local tribal communities in view of recent disturbances.

Below Levy describes status of the office of tribune at the time, also telling is how important at the time was the Berber land acquisition to Rome and how essential it would have


96. CIL III, 338. (Corpus Inscriptionum Latinarum). The CIL is listed by Whittaker as the source of this inscription and is referenced along with ‘Tacfarinas’ land demands’ (please see earlier footnote under Michael Grant: Tacitus. Annals III, 73). However, whereas the latter reference was found (see above) and understood to concern the land demands by Tacfarinas for the Musulamii and other tribes, there is no mention of a census in this reference (III, 73). As to the CIL III, 338 reference, it cannot be found and the allusion to the inscription cannot here be substantiated.

been to placate the Berber tribal leaders and demonstrate a show of force at the outset. Rome was in no position to bargain over money or land and had to ensure capitulation from the Berber on both these fronts. Taxation and land were imperative to the state’s function and had to be obtained for the continued function of the machine of state. This, after all, was the era of centuriation. Land had to be found for veterans with twenty-four (24) years of service to the army, and the appropriation of the land from the native Berber was key in satisfying these obligations.

In addition to land required for veterans, a large amount of land was also required for colonists who had already begun arriving as early as 122 BC, following tribune Gaius Gracchus declaration that former Carthaginian territories ought to be put to good use. Such land appropriations were ongoing and would have been preceded by just such a census as described here, and immediately followed (or preceded) by cadastration, the land allotted to individual veterans – Romans all. Indigenous Berber lands, most of which were held in common, would have been appropriated without permission or compensation.

Tacfarinas would have seen this coming. He would have foreseen that veterans already in the provinces would have first pick at ancestral Berber lands. As legionnaire populations retired, and in accordance with Roman law, land would be allotted them, frequently in the very

98. Only 20 years would have sufficed for an honorable discharge, which was another option. The Roman Navy required 26 years of service.


lands where the veterans had served, thus further deepening the tie between veteran an army and further alienating him from Berber inhabitants. No doubt Tacfarinas would have also have foreseen this development, adding centuriation to the long list of grievances against further encroachment onto tribal lands.

But the Romans perhaps also foresaw this and decided to demonstrate the extent of their power in sending not just a person, but the army itself to perform the census – just to be sure. In the section below Livy (Titus Livius) describes the census conducted by a tribune of the Augustan III Legion, giving a better sense of the person’s entourage as well as the impression the contingent would have made on the local tribes people:

Thus the concern regarding the two wars which were hanging over them being laid aside, whilst there was some repose from arms, it was determined that a census should be instituted, because the payment of the debt had changed the owners of much property. [7] But when the assembly was proclaimed for the appointment of censors, Caius Marcius Rutilus, who had been the first plebeian dictator, having declared himself a candidate for the censorship, disturbed the harmony of the different orders. [8] This step he seemed to have taken at an unseasonable time; because both the consuls then happened to be patricians, who declared that they would take no account of him. [9] But he both succeeded in his undertaking by his own perseverance, and the tribunes aided him by recovering a right lost in the election of the consuls; and both the worth of the man brought him to the level of the highest honour, and also the commons were anxious that the censorship also should be brought within their participation through the medium of the same person who had opened a way to the dictatorship.101

It is interesting to envisage all the components of the census to which area tribes were expected to submit. Because tribal peoples were not citizens, their lands were appropriated without compensation of any kind and, as seen above in Tacfarinas’ demands viewed with such distain by Tiberius, in the eyes of the tribesmen the demands were actually well founded ‘stipulations and

conditions for land rightly theirs.’ Had this land been owned by a Roman citizen, it would by law have been owned severally: not only would compensation have been given, but other civilities would have been accorded them by the censor such as a reading of the Senate lists (lectio senatus) and due homage would have been given to any ordo equester. No such civilities would have ensued following the census in question and tribesmen had no legal status per se. And though we have not date for the CIL III, 338, much the same process would have taken place during the road construction from Tacapae (mod. Gabès) to Ammaedara which was a primary cause of the Tacfarinas Revolt. The cadastration of that region of Tunisia is consistent with this sequence of events having been completed in c. AD 29-30 and also consistent with Tacfarinas death in AD 24, such that the cadastration itself could only have been accomplished once the violence had diminished. Once Tacfarinas was killed much of the wind was knocked from the sails of the rebellion, but the land the tribes lost can be roughly estimated.\footnote{102} In addition to having the land removed, the census would have assessed a tax on remaining property such as animals, produce and other material goods and depending on the overall valuation of the tribes’ property.

Why a tribune was dispatched for this particular census rather than the usual censitores\footnote{103} and imperial legati\footnote{104} (the usual census-takers in the provinces), Whittaker does not

\footnote{102}{The width of the road had to accommodate two chariots passing, so allowing approximately 2 meters per chariot width including the wheel hubs, horses, etc. The road might have been about 7 meters across, and if we estimate the length at about 320 km it would be: 320(7) = 2240 sq. kilometers of land removed from the Berbers.}

\footnote{103}{Special officers to perform the census.}

\footnote{104}{Senators served as legates (legati) and functioned as generals, diplomats, and administrators. See A. Winterling, \textit{Politics and Society in Imperial Rome} (Chichester: Wiley-Blackwell, 2009), 16.}
make clear, but the use of a tribune is perhaps significant in assessing the Roman view of the potential threat posed by the Musulamii, and the Gaetulians, at the time under Tacfarinas.

According to Fage, during the Republic Roman provinces were administered by ex-magistrates who administered under the title of proconsul or proprietor. But in 27 BC Augustus (r. 27 BC-14 AD) divided up the administration of the Empire with the Senate such that certain provinces (Africa Proconsularis being one) were administered according to republican practice by deputies of senatorial rank - *legati*. Alternatively such provinces would have been administered by officials of equestrian rank – *praefectus or procurator*. Still later Augustus overrode the powers within the ‘senatorial’ provinces and administered these directly himself. At the time prior to Tacfarinas’ rebellion both Africa Proconsularis (including the original Africa from 146 BC at the fall of Carthage and the newer portion annexed in 46 BC) together with Cyrenaica were assigned to the Senate. Regionally, the province of Egypt was governed by an equestrian *praefectus* while Mauretania was divided into two provinces, each also governed by a *procurator*.

We also know that Numidia had been “carved out of Africa Proconsularis” in 40 AD and assigned to the emperor under the administration of a *legatus* of senatorial rank. It is interesting to speculate that this ‘carving out’ might well have been done due to continued guerilla activity in the wake of Tacfarinas and which the emperor preferred to manage directly.105

**Chapter conclusion**

Compared to earlier Punic and Greeks settlements, Roman colonization had by far the most far-reaching effects upon the Berber. Whereas the Greek and Carthaginian economies had some involvement in the North African interior, trade was minimal compared to exchanges with

other Mediterranean trading centers. Cyrene dealt with sister Greek states and Egypt and Carthage, except for dealings with Sicily was a Phoenician-Mediterranean centered power, only turning inward to the African continent when Sicilian ports were lost to her. Rome’s arrival significantly altered the region’s economy, possibly for evermore. The empire’s enormous population necessitated extraordinary demands, particularly in grains, oils and other commodities and North Africa’s interior became Rome’s breadbasket. As Berber tribal areas were transformed into imperial tract farms, indigenous populations lost anchor in societal norms while others were assigned to stock-raise across interior mountain plateaus. Such profound transformations were unlikely to go unnoticed and the Berber way of life was altered in ways which would reach beyond Rome’s fall, some of the changes are still being felt today.
CHAPTER 3
THE PLIGHT OF TODAY’S BERBER

This chapter describes the effect of ethnic disparities upon Berber populations across the Maghreb and how in light of recent political changes in the region the Berber are increasingly emerging as a key political actors in the North African political arena. Contrary to what was believed when it began in the late 1970s, the Berber movement spread quickly through the Maghreb bringing with it not only pride in a rich and diverse cultural heritage predating any colonial forces, but also the seed of secularism which later developed as an important feature of the Berber intelligentsia. Secularism necessarily invokes the notion of laïcité and the vestiges of French occupation across most of the Maghreb, but laïcité also served as precedent for a valid identity outside the precincts of religion and national boundary. Being Algerian and Moroccan need not mean being Arab or Muslim any more than being Arab or Berber need being Algerian/Moroccan or Muslim. This development later fed into the quest for the collective Berber identity, particularly strong in the Algerian Kabyle where the movement had strong backing from local Berber universities. Rabat universities would soon follow with their bevy of Berber scholars.

As the journey to democratic rule continues each nation will somehow have to reconcile the Berber need for public recognition and equal status within the state with national rights of sovereignty, administration of majority rights, and a national vision of the role of self-determination within the citizenry, all of which depend on that nation’s moral imperative to guarantee equal rights. The question is, whose moral imperative shall be used?


**Ethnic inequality, social unrest and polity**

Ethnic diversity can be a rich, positive societal attribute which enhances socio-economic and religious differences between ethnic groups and leads to a well-adjusted social fabric. Rich ethnic diversity in large international cities where businesses and individuals have relatively equal access to opportunities, goods and services can be economically rewarding to all. But where socio-economic distributions are unequal, ghettos and ethnic enclaves evolve, isolating inhabitants from the general economy with little recourse to engage in the community’s overall economic progress.

In the west, such developments ethnic diversity is addressed by public policy measures which help adjust disparities in local ethnic communities. But in developing countries where funds are short, such policy measures are absent or minimal, and ethnic enclaves flourish with sharp divides occurring in ethnic populations over time. Disparities in background, culture and education levels place differing ethnic populations in close proximity, causing escalating in and inter-ethnic prejudices. Over time such endemic prejudices cause ethnic disruptions across every sphere of society effecting socio-economic, ethnic, and gender relations at all levels. As these ethnic disparities develop over long periods, adjustments to social systems become unwieldy and any regaining of social equilibrium unravels from within. Such was the plight of the Berber who, particularly following the Arab conquest, became increasingly isolated in their choice to retain cultural identity rather than have it subsumed within a Middle East and North African pan-Arabism.

Only in the past few decades, have the Moroccan and Algerian Berber populations begun to chafe under the repeated invocation of nationalism by government élites eager to assuage the call to Arabization from the Middle East. The effect on the Berber was twofold: It
first invalidates any claim to non-Arab identity by making Arabism the blanket national ethnicity, effectively removing any Berber ethnic claims altogether. Secondly it implies a regional religious Arab community due to the Arabic language itself since, as the sacred language of the Qur’an, Islam in turn implies a default religion. How better to unite the disparate ethnic entities within a country than by appealing to a common identity? As leaders in Morocco and Algeria to discover, however, this may not have been a judicious call and some backpedaling has become necessary as seen recently in Morocco.

In June 2011 Mohammad VI of Morocco, amid a torrent of protest which had begun months earlier, consented to a number of constitutional reforms. Significant amongst these was the recognition of Berber as an official Moroccan language. Conspicuous in their silence under Qadhafi, Libya is currently seeing an eruption of Berber dissent as the country tries to settle into its new identity as a quasi-autonomous, ethnically inclusive state. The effect is somewhat diminished, however, by a congressional coterie unable to countenance any language which might threaten the importance of sacred language of the Qur’an. Libyan Berber are now boycotting the drafting of the constitution, knowing the import this will have not only on the outward perception of the government’s legitimacy but also on the Libya’s economic engine, but they also have sabotage on their minds:

Unsurprisingly, ethnic tension has also trickled into the oil sector. Amazigh protesters stormed the Mellitah oil and gas complex, which has a capacity of 160,000 barrels/day, at end-October. Protesters have also followed through with their threat to block gas exports to Italy and shut down the Greenstream pipeline, which transports gas to Italy, on November 11th[2013]. This will certainly have a knock-on effect on the government’s budget balance for 2013, and the prime minister himself confirmed that the budget balance will shift into a deficit this year, according to the Libya Herald daily website.¹

¹. The Economist IU
In Algeria, the ailing Bouteflika and his FLN party might do well to heed the activities of Mokhtar Belmokhtar's *Signataires par le sang*, having upstaged Algerian efforts to contain them during the Amenas affair just months ago they are currently 'working' under the sobriquet of *Les Almoravides*, presumably in the interest of garnering support from the jobless southern Algerian Berber swains who might prefer to opt for jihadi loot over national oil interests:

Il [Mokhtar Belmokhtar's ]a appelé les Algériens "à se tenir à l'écart des lieux d'implantation des compagnies étrangères", car, a-t-il dit, "nous surgirons là où personne ne s'y attendra".4

He [Mokhtar Belmokhtar's] asks Algerians to “keep clear of foreign-owned installations”, since we shall strike where it is least expected”.5

In Tunisia the political situation is frail at best as protesters (November 2013) set alight the local headquarters of *Hizb al-Nahda*, a moderate Islamist coalition party currently leading the coalition government, protesting unemployment and deprivation, current youth codenames for consternation at the stuttering progress and bickering for leadership by older politicians. Of some comfort is that Ben Ali’s position as president, appears now to be that of figurehead rather than dictator, and the current opposition to the well-organized, well-endowed *Hizb al-Nahda* party appears to be counterbalanced by a heady collection of secularists, intent on the upcoming (likely December 2013) elections. But with the overwhelming proportion of the

2. An AQIM offshoot (al-Qaida in the Islamic Maghreb (AQIM)).

3. January 2013 the Amenas gas plant in southern Algeria was seized by AQIM, killing many and creating an international incident due to the joint Algerian, Norwegian, British ownership of the gas plant. “In Amenas: "Il y a eu des alertes dans les mois précédent l’attaque" L’Express.  


5. Translated by this author from the quote above.
Tunisian youth unemployed hovering around 29% and 15% for males and the females respectively, current sentiment seems to be that the country will once again succumb to anarchy unless the ‘elders’ commit themselves and stop bickering. Interesting also in Tunisia is the rural population where most of the Berber are found and, though officially only 1% of the population, the Berber do have the Tunisian youth on their side which in Tunisia’s case amounts to a sizeable portion of the country’s population.

Egypt’s current descent into chaos continues even as the Supreme Constitutional lifts the state of emergency measures adopted after the atrocious Cairo death count in August 2013. The turmoil is debilitating to minorities like the Copts, but what effect will it have on Egypt’s tiny Berber contingent, tucked away across a desert to the west? Apparently even the remote oasis at Siwa, Egypt’s single Berber enclave, isn’t immune to influence:

Egyptian authorities have arrested two more Islamist figures: a hardline cleric trying to flee the country across the Libyan border and a spokesman for the Muslim Brotherhood group before leaving for Italy. The arrests are the latest in a crackdown by Egypt’s new military-backed leaders against Islamists. Egypt’s state-run MENA news agency says Safwat Hegazy, a fiery Salafi preacher and top ally of the Brotherhood, was captured early Wednesday at a checkpoint near the Siwa Oasis, near Libya. He is wanted over charges of instigating violence. Also, a security official says Mourad Ali, a spokesman for the Brotherhood’s political party, was detained at the Cairo airport, trying to catch a flight to Italy. The official spoke on condition of anonymity because he was not authorized to speak to the media.

Across North Africa, despite a patina of secularism in large cities such as Rabat, Algiers, and Tunis, lies the deep-rooted and indelible concert between Islam and the political process. Leftists complain of the enmeshed quality of the religion and profess the common cause of

6. In mid-August 2013, security forces trying to clear the streets of Cairo of protesters were instrumental in the deaths of some 600 of them. Following this event the state of emergency was declared.

secularism and some amongst the (usually university-educated) élite voice a call to arms, attempting to save the last bastions of intelligence before the political process descends into the inevitable chaos religious *pêle-mêle* characteristic of any large social group prioritizing one religious credence over another – Sunni, Shi’a, maraboutism, spiritualism, et cetera.

*Separation of church and state*

As Rousseau pointed out, religion is an offshoot of the human condition, the inescapable *amour de soi,* and its expression is therefore as diverse as there are people upon the earth’s surface. Hence, catering to any single religion becomes impossibility and separation of faith from the powers of the polis became emblematic of the well-functioning state.

Europe long ago experienced the throes of religious foment and took arms against it, and to this day French Revolution stands as the vanguard of secularism, achieved at great expense to society of the era. This division of powers had been virtually rent from within, culminating in the sweeping away of entire old social order. Gone were the trappings of medievalism with its reliance on hierarchical authoritarianism. A brazen, modern world was ushered into existence free of the accoutrements of religion and monarchy and solely dependent on ‘individual’ reason. No stone was left unturned in examining every aspect of societal behavior at the very crux of which lay the enlightenment notion of free agency, how the individual makes his choices and the extent to which they are either autonomous or dictated by social structure. As a corollary of this, religion, its sources and constructs were weighed and analyzed, the written ‘Word’ duly scrutinized and its derivations questioned, authenticated but mostly rejected. Regicide dispensed with the societal and legal emblem of the divine, and religion itself was summarily and ceremoniously dispatched. What better example of this orgy

8. Self-love, as in the Rousseau idea that human creatures possess self-love as part of an instinct for self-preservation.
of secularization can one cite than the consecration to ‘Reason’ in the newly desecrated Cathédrale Notre Dame de Paris in 1793?  

This extreme shift in societal norms was later modified, but religion never again to regain its role in government. The execution of the French king was the death knell of the divine right of kings brought to the West so long ago and thereafter European states were to reflect this phenomenon. Rousseau never lived to experience the Revolution nor, thankfully, the ensuing Terror but Rousseausque ideals were to determine the very foundation of citizen rights throughout the West. In 1776 this notion of reason, the exemplar of Enlightenment thought, became the very foundation of Declaration of Independence and in it were enshrined the power of individual rights, again with reason as its root, of thinking for oneself and by oneself. And upon its heels, in 1791, came First Amendment which “shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof...” Side by side lie the right to reason and the right to choose, or not, one’s own religion. And as John Adams assured in the Treaty of Tripoli (1797), assuring the Muslim nation of the U.S. ‘a-religiosity’: “the Government of the United States of America is not, in any sense, founded on the Christian religion.” The only protection for free religious expression by any one individual was, as the French and Americans discovered and as Locke had averred long before, in leaving the


11. The Treaty of Peace and Friendship between the United States and the Bey and Subjects of Tripoli of Barbary, was authored by American diplomat Joel Barlow in 1796, and was sent to the floor of the Senate, June 7, 1797, where it was read aloud in its entirety and unanimously approved. John Adams, having seen the treaty, signed it.
profession of religion to the individual’s reason. The sole protection to religion the state would afford was a vociferous endorsement of one’s right to practice it.

Religion was now separate from affairs of state. It had taken ages to accomplish but the logic, the reason, the paradox of religion was irrefutable. Religion could not, nor could it ever be an affair of state, and though monarchies persisted for some time, government became the voice of the people without the bonds of religion, and nowhere in the enlightened West were the two again to be conflated. In the process of undertaking to think for itself no ‘one’ religion would dominate while preserving the individual right to practice a religion of choice.

The West has had a few hundred years to accommodate the notion of separation of religion and state, not that there haven’t been relapses. Only recently the US Supreme Court heard yet another case involving prayers in public places.12 Clearly then, like anything dealing with society constant readjustments are required to temper the seemingly inevitable human tendency of one group asserting primacy over another.

**Berber identity within Islam**

But what has the separation of religion and state to do with the Berber. After all, hasn’t North Africa been under the yoke of Islam since the Arab conquest in the 7th century? Hasn’t the Umma been central to the notion of pan-Arabism, the collective unity of the Near East and North Africa under the protectorate of Islam? What possible conflict could exist between a religion of such long standing and the Berber who so avidly adopted it? The problem lies not

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with the religion itself but, as the Berber see it, in the application of Islam to their current
governance which they perceive as alien to their ethnic identity and harks back to the initial
Arab domination.

The resurgence of a Berber identity movement is a complex issue involving many
different Berber tribes across five countries, but for the most part it involves not the repudiation
of Islam, the religion, but rather the language of Islam, Arabic. In what is faintly reminiscent to
Western ears as the status of the Christian bible just prior to Lollards, the ‘word’ of the Qur’an
and the ‘book’ itself are immutably bound together. Repudiation of the Arabic language per se
becomes problematic since the practice of the Islamic faith must be read in that ‘sacred’
language of Arabic. But despite this fundamental constraint a solution appears, to the Berber at
least, to be in the offing.

In 1999 a Moroccan school teacher unveiled what he thought of as the answer to the
Berber problem of ‘owning’ their religion, making it available to all - translate the Qur’an into
Tamazight\textsuperscript{13}, but as with his Christian predecessor\textsuperscript{14} some 600 years earlier, his endeavor has
been less than well received, though he wasn’t the first:

A history teacher in a Casablanca secondary school would appear an unlikely threat to
North African Muslim orthodoxy. Yet Johadi Lhoucine is putting the finishing touches to
a project liable to shake the Moroccan establishment. For the past ten years, he has
spent his after-school hours translating the 114 suras (chapters) of the Koran from
Arabic into the Berber tongue, Tamazight. He says he is trying to make the Koran
comprehensible to the majority of Moroccans for whom Tamazight is their mother
tongue. Reasonable, one might think.

The Koran has been translated into more than 40 languages. Turkey, Pakistan, Indonesia
and Iran all have their vernacular renditions and accompanying interpretations.

\textsuperscript{13} Tamazight is the language of the Berber of which there are many subgroups.

\textsuperscript{14} Wycliffe, before the Protestant Reformation, translated the Bible into the common English in 1382.
Morocco’s Berbers do not. In the tenth century, the Bourghwata\textsuperscript{15} kingdom translated its Koran into Berber, and even had its own Berber prophet, Salah bin Tarif, a Jewish convert to Islam. But the Bourghwatas were vanquished by Sunni puritans, who denounced them as apostates and burnt copies of their Berber Koran.\textsuperscript{16}

Like Wycliffe before him, Lhocine is answerable not only to the Faith but to the combined equivalent of ‘papal potentate-constitutional monarch’ - none other than King Hassan of Morocco himself. To date there is no news of the fate of the translation, but since the kingdom has been on tenterhooks with the current upsurge of Berber unrest, perhaps King Hassan views the incident philosophically as an inevitable and much-needed reform to the constitution to better accommodate the (widely varying accounts) of the country’s significant Berber population.

In the mountains of northern Algeria, deep in the Berber Kabyle stronghold, leftist intellectuals continue the decades-old battle to protect not only their leftist, minority secularist views, but also to preserve the unique Berber practice of Islam – that of practicing a faith without that faith defining the community.

But how viable can such practice be given the dictums of Islam where the umma itself is the ultimate identity? Islam defines itself primarily as a unique community within which all peoples practice according to individual custom. The Berber have accommodated Islam to their particular customs yet claim ethnicity and not faith as a primary source of identity. Wouldn’t this relegate Islam to a penultimate position? If Berber identity seeks to be defined in this way-

\textsuperscript{15} The Barghawata were a confederation of Berber tribes of the Atlantic coast of Morocco, belonging to the Masmuda group of tribes. After allying with the Sufri Kharijite rebellion in Morocco against the Umayyads, they established an independent state (CE 744 - 1058) in the area of Tamesna on the Atlantic coast between Safi and Salé under the leadership of Tarif al-Matghari. Barghawata. \texttt{http://en.wikipedia.org/wiki/Berghouata}, (accessed September 3, 2013).

Berber first and foremost with Islam as a qualifier- how readily will this be accepted by the overwhelming non-Berber populations of North Africa?

The Berber have a long history of unique tribal identity and independence, and despite encroachment of colonizing forces through the millennia, they have been successful in preserving these unique cultural characteristics. Non-indigenous religions have come and gone since Punic times, but despite adoption of some practices the Berber have maintained a cultural uniqueness by incorporating incoming religious practices while maintaining a uniquely Berber character. To this day Islamic clerics are irked by the Maghreb’s persistent practice of maraboutism, much frowned upon by the mainstream and vilified by orthodox Islam, but it too harkens back to pre-classic times when saints and soothsayers, not the ulema,\textsuperscript{17} formed the core of Berber religious culture.

Given recent Berber politico-ethnic successes in Morocco and Algeria, it is difficult to determine how this ethnic recognition will be resolved to the satisfaction of all parties. Perhaps Maghrebi Islamic clerics will choose turn a blind eye to religious ritualism so as to satisfy popular demand for ethnic Berber recognition. Perhaps too politico-religious leaders like King Mohammad will deal with an increasingly dominant (and increasingly secular) Berber force in the political arena with greater inclusiveness, particularly in light of rising rates of globalization. Algeria’s ailing President Boutiflika’a reconciliation with the ever-strengthening Berber political influence will be interesting to observe, particularly in view of al-Qaeda’s alarming growth in the Kabyle itself. Once he leaves the exquisite juggling act between religious and secular may not fall into such experienced and skillful hands.

\textsuperscript{17}Ulema are the legal scholars of Islam.
Though outwardly quiescent, ethnic disparity in the Maghreb is an already proven instigator of regional unrest, and it will take some proverbial nimble footwork to avoid treading on delicate toes. As regional strongmen are struck from list of actors what fragile, quasi-stability the region has experience in the past decades might well be eroded. Should right-winged factions gain the upper hand in the Maghreb, many secular Berber may join their fellow émigrés in France, Belgium and other parts of the Berber diaspora. Those remaining, mostly the less well educated and less prosperous, will doubtless succumb to prevailing ultraconservative demands for religious conformity. Should that eventuality occur, Berberism might yet survive underground, ever-defiant of outside dominance. Alternatively (yet inconceivably) a united Berber solidarity might form, uniting Berber communities across Morocco, Algeria and Tunisia, an open rebellion of ‘First Nations’ against an entrenched foreign force.
CHAPTER 4
BERBER POPULATION DISTRIBUTION

Berber populations are distributed unevenly across the continent in groups varying in size from less than two thousand to over three million. Together Morocco and Algeria account for most of the Berber population, though history reports that they originated in Tunisia, near Gafsa. In chapter two a background was given on Berber interaction with incoming settlers including how instrumental the Romans were is uprooting the Berber. This, desertification from the Sahara, may in part explain the population pattern distribution of Berber today. Algeria’s Kabyle has the largest and densest Berber population and certainly appears to be the epicenter of Berber movements, though Rabat is a close second.

This chapter offers a brief description of Berber groups with location and population size followed by a breakdown of the population classes which yields a better on population distribution. With some exceptions, Berber groups are described in declining order of size, beginning with the Kabyle and ending with the Temacine. Egypt’s Siwi Berber, once was part of greater Libya, are that country’s single permanent Berber population. There is, however, another Berber population in Egypt but because it is a transient population the Tahaggar Tamahaq not included in Egypt. Instead they are listed with Algeria which they consider their ‘homeland’ and from which they take their name, referring to Algeria’s Hoggar Mountains. Because of this, Fig. 4.3 shows only one Berber group for Egypt.¹

¹ Please note that the Tahaggar (Hoggar) Tuareg are not included in Egypt because of their transient lifestyle.
Social conflict among the Berber is measured by the Social Conflict in Africa Database (SCAD)\(^2\) data and a brief account of the number of these events follows. Social conflict events include demonstrations, protests and other low-level conflict events but do not include events that are deliberately violent at the outset. Though it is understood that violence can result from demonstrations or protests, the initial intent at orderly civic disobedience is what is captured by characterizing the type of event at the onset.

**Primary Berber populations and locations**

Of Algeria’s forty-eight (48) wilayat, or provinces, Berber live in thirty-four of them (34) and, as mentioned earlier these various Berber tribes are dispersed in different concentrations, over various regions and, as with all natural phenomena, do not adhere to man-made provincial and national boundaries. Because the Berber are primarily nomadic, many Berber groups in this analysis span enormous expanses of terrain, much of it mountainous. This transhumant movement is by definition seasonal with populations moving across desert plateaus and mountain ranges, covering vast distances, frequently through the porous, unmanned borders.

An example of Berber group distribution can be seen in Adrar province which is bordered to the north by the Saharan Atlas Range and Great Western Erg and to the northeast by the Tademaït Plateau. As closely as can be estimated in these vast, mostly uninhabited desert regions, Adrar’s three Berber ethnicities, the Tahaggart-Tamhaq, the Taznatit and the Tidikeit (Tidikeit), collectively number about 43,700 in a total provincial population of approximately 311,615. Whereas the Tidikeit the Taznatit are mostly agrarian, cultivating the

\(^2\) SCAD is the source of all the conflict data in this paper:

archipelago of oases in Algeria’s southwestern desert, most of the Tahaggar Tamahaq, or Northern Algerian Tuareg as they are also known, remain nomadic. Due to modern constraints on their nomadic lifestyle, these members of the Tuareg tribe are becoming increasingly sedentary.

As shall be demonstrated, these peoples distribute naturally, usually across areas and geographic locations supportive of their herds and transhumant lifestyles. The Tahaggart-Tamahaq addressed here, are shown on the Ethnologue map as being distributed across five provinces from Ghat province (Libya) in the north, south into Mali, from western Murzuq province (Libya) to the southern tip of Adrar province (Algeria) in the west, with a known coverage of some 416,900 km². No set boundaries exist for this Tuareg group and they are found throughout these southern latitudes and opportunity takes them.

The most numerous of Berber are the Kabyle who number about five (5) million and extend over 10 ten provinces in northern Algeria along the Mediterranean littoral, abreast the Tell mountains from Béjaïa and Tizi Ouzou to M’Sila in the south, east to Jijel and west to Boumerdes and Médéa. Of all the Berber the Kabyle have the greatest number of universities in their region and some of these institutions actually teach in the Berber language.

The Tachelhit are the next most numerous at approximately 3.89 million. They cover an area across Morocco’s southern region just southeast of the Ante-Atlas, and near the country’s two contested territories bordering Algeria’s Great Western Erg, at Tindouf province, forming their eastern boundary. They are bordered to the west by Marrakesh-Tensift, to the north by Tadla-Azilal, and Guelmin-Es-Smara contains the southern portion of the Tachelhit. To the north the Tachelhit border the Central Atlas Tamazight whose domain runs northeast along the Atlas Mountains as that range heads from southwest to northeast, extending as far north as Gharb-
Chrarda-Beni-Hassen, east from l’Oriental along the Ksour Mountains, and straddling the Great Western Erg, over to Rabat-Salé in the west. They number about 2.34 million.

The 1.4 million strong Tachawit reside solely in Algeria, covering ten (10) provinces in the country’s northeast bordering Tunisia in a climate far more hospitable than other Berber; cooler and with far greater rainfall and conducive to primary agricultural. The Tachawit northern region, in Guelma province, is within about 60 kilometers off the coast, their southern range is at about Khenchela and Biskra, west to Batna and to the east encompasses the ancient Roman province of Tébessa, later the temporary home of the Legio III Augusta before being removed to Lambaesis.

The Tarifit people have three distinct, non-contiguous locations. Far to the west they are located on the Moroccan north on the Mediterranean from Taza-Al Hoceima to Melilla³ (Spain) and south into L’Oriental province. This first of their areas, together with their second region extending over a small enclave inside Tlemcen province, together totals about 1.14 million. Much farther to the east, yet still on the Mediterranean, is their third location on the littoral side of the Tell Mountain Range in Oran province. This is their principal location, with some marginal spillover into neighboring Mascara. Here they number about 114,300, some 400 due east of Oran. All told they are about 1.2 million.

Libya has five (5) Berber ethnic groups, the most numerous being the Jabal Nafusa Berber (Nafusi), with a calculated population (based on surface area 6,403 km²) of 184,000. They were known by the ancient Egyptians as the Libu and recorded by Herodotus during his

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³ Melilla is a Spanish territory located in North Africa and next to Morocco. Many Rif Berber inhabit Melilla and Rif is spoken there.
visit to Libya in the fifth century BC. They are located in the northwest of the country in the districts of Gharyan, Nalut and Yafran-Jadu.

The Mozabite (Tamzabt) Berber are located in an archipelago of oases in Ghardaïa province on the eastern boundary of the great Western Erg, just southeast of the Saharan Atlas with a population of about 150,000. They have inhabited the oases of Ghardaïa, Beni-Isguen, El-Atteuf, Melika and Bounoura (and two other isolated oases farther to the north at Berriane and Guerrara) since the 10th century when escaping the Fatimids. They were originally part of the northern Zanata Berber and espouse a conservative form of Islam. They are most remarkable for their belief that the Qur’an was created⁴, rather than being the eternal word of God, a tradition dating from ancient Baghdad Caliph al Ma’mun ibn Harun.

The Chenoua of Tipaza number about 66,677 and inhabit the Tell Mountains along the Mediterranean dominated by Mount Chenoua, only about 70 kilometers west of Algiers. To the south they are bordered by Ain Defla, to the west by Chlef and Tipaza province to the east.

Morocco’s sixteen (16) wilayat contain fourteen widely dispersed ethnic Berber regions. Tanger-Tétouan region of Morocco is home to the Ghomara Berber (population about 10,000), in the northwestern most wilayat just off the coast of Gibraltar in the northwestern extent of the Rif Mountains. The Senhaja are in two pockets just below the Ghomara, and also in Tanger-Tétouan as well as in neighboring Taza-Al Hoceima-Taounate (population about 40,000).

The Tahaggar Tamahaq (Algerian Northern Hoggar Tuareg), numbering about 39,800, currently show a Libyan population which encroaches into the districts of Ghat and Murzuq. As

⁴ The notion of the Qur’an being created and not ever-present began under the reign of Caliph al Ma’mun ibn Harun (r. 813-833) of Baghdad but the idea lost ground after his death.
Tuareg, and especially the Tahaggar Tamahaq, their boundaries would realistically be far greater, extending south into Niger, and well across Libya into Egypt where they have a known presence in both Matruh and Wadi el Jadid provinces. As with all Tuareg they move constantly travelling the Sahara between all regions but for tax purposes, are principally located in Ghat.

Egypt has a single Berber ethnic group, the Siwa who inhabit the oasis of the same name in Matruh province. The Siwi Berber have been at the Oasis since early Egyptian times with records showing interactions to the west with other Berber groups and with the ancient Egyptians. They are located in Egypt’s Matruh governate with a population of about 30,000. The Tahaggar Tamahaq, though Algerian in origin, also frequent this area.

Gabès contains six (6) subgroups of the southern Shilha Berber: the, Duwinna, the Jerba, the Matmata, the Nafusi Taoujjout, the Zawa, and the Tamezret. Collectively these groups number approximately 19,500 and still inhabit the very site of Herodotus’ famous Lotophagii (Sirtis Minor), on what was the ancient Gulf of Gabès, situated about 400 kilometers south of Carthage, and 138 kilometers south of Sfax.

The Sawknah of Al Jufrah only number about 5,600. The Awjiliah now numbering only 3,000 are mostly situated in north central eastern districts of Al Wahat and Ajdabiya. The ancient Ghadamès have dwindled to 9,700. They are now located just inside the Libya border with Algeria.

The Temacine Berber are situated in Ouargla province, south of the Aurès Mountains and straddle the Great Eastern Erg bordering Tunisia and number only about 6,000.
Of Tunisia’s twenty-four provinces (governates), only four contain Berber ethnic groups, all of which are in the south in the neighboring provinces of Kebili, Gabès and Médénine which includes the island of Jerba, and further south again in Tatouine province.

It seems unlikely given Berber herding movements that the Tachawit of northeastern Algeria, along the Aurès Mountains have no population in Tunisia as this range extends a great distance into northwestern Tunisia. The Ethnologue map⁵ shows the Tachawit remaining neatly inside Algeria’s national border, with no spillover into Tunisia. Although this is would reduce the Tunisia Berber count to one consistent with Tunisia’s low Berber estimate (about 1%), it would see more likely that the Tachawit extend well into le Kef governate sharing the Aurès Mountain plateau with their Algerian Berber tribes, the border cutting north-south through their range. As mentioned earlier, the Ghadamès Berber of Tatouine inhabit an area intersecting Algeria, Tunisia, and Libya. The entire population has a rough count of 10,000.

**Berber population classes**

Table 4.1 below breaks the Berber populations into classes according to population size showing the class distribution of the Berber across the five countries. Morocco and Algeria together account for a Berber population of 14,302,479, more than all the remaining Berber put together: Egypt, Libya, and Tunisia have a total Berber population of 260,420.

Of the six provinces in the **1.5 to 3.5 million class**, four of these are littoral or partly so: Béjaïa, Tizi Ouzou, L’Oriental, and Souss-Massa-Draa all border the Mediterranean, or in the case of Souss the Atlantic. Only Khenchela and Fès-Boulemane are land-bound.

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### Table 4.1 Berber population groups size and distribution.

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### Fig. 4.1. Berber Population Distribution

**Sources:** Author’s graph generated using Ethnologue ethnic population data and ethnic map for the North African region and projected onto GIS mapping software to obtain the ethnic population totals. Non-Berber data was obtained from City Population.de.

* Tahaggar Tamahaq are not included in Egypt’s permanent Berber population but in Algeria’s.

Four Berber populations are between **500,000 and 1.5 million**. They are distributed almost equally between Morocco and Algeria with two of the populations being littoral (Oran...
and Tanger-Tétouan). The remaining two, Sousse Massa-Draa is dual inland and littoral and Naâma is inland. There are ten populations between 100,000 to 500,000, these classes predominate in Morocco and Algeria, each, each country containing four of each class. The remaining two populations are located in Tunisia and Libya. Two of the Algerian populations are in the same province of Adrar, and all the Algerian populations together with the single Libya are desert bound: Adrar, Ghardaïa and Tindouf, and Sabha (Libya). Morocco’s provinces in this class are Fès-Boulemane, an inland province, two in Sousse-Massa-Drâa which is mostly inland but has access to the Atlantic on its western border, and a fourth. Six Berber population groups number between 50,000 and 100,000 and occur only in Morocco and Algeria. The largest number of Berber groups (12) occurs in population sizes of between 10,000 and 50,000. This population size prevails not only throughout the Maghreb, but also in Egypt. Libya has five such populations, Morocco, Algeria, and Tunisia each also have two, and Egypt one. Eight populations range from 2,000 and 10,000, with four located in Tunisia, and two each in Algeria and Libya. Historically speaking the Tunisian/Libyan have long been linked with the Sawknah Berber, forming a trade route which formerly linked Punic Carthage to her trade routes in the desert, while in ancient times the Awjiliah would have linked the former Greek pentapoleis of Cyrenaica to Egypt. At that time he Tamezret and Matmata people were both avid traders with ancient Carthage carrying goods from central Africa and may be the descendants of the ancient Garamantes mentioned by the Greeks and Latins. The smallest class is comprised of two populations containing less than 2,000 individuals and are located in the same Tunisian province (governate) of Gabès, in the Gulf of Gabès on the Mediterranean.

Situating the SCAD events within the Berber Maghreb regions is difficult because boundaries of individual provinces have shifted over time, causing fluctuations in population
counts. Only by restricting the analysis to recent time periods is it feasible to get even a rough idea of what within-country Berber populations are, and only then can we look at the SCAD events within them. The provincial population data used here is from the 2008 census, chosen primarily because it was the earliest year when census with census overlap for all five countries, and secondly because to include Libya it had to be after 2007, Libya’s most recent date for reconfiguring her districts. Prior to 2007, Libya had 32 districts (2001), 26 in 1998 and in 1995 only 13, making population counts per province between these years irrelevant. This would not overly effect the Libyan Berber populations since ethnic Berber communities within most country boundaries have tended to remain relatively constant from year to year, isolated as most are from main urban areas. This would not be the case in more dominantly Berber countries such as Algeria and Morocco since those Berber population increases are higher which would more greatly affect outcomes (since Berber populations are to be scrutinized relative to non-Berber populations). What follows is a brief description of the geographic locations of Berber by province, with those residing in the same province grouped similarly. The number of SCAD events along with the particular Berber ethnicity and province(s) where each group resides is listed in the table below entitled 4.2 Berber Ethnicity by Province & SCAD count 1990-2011. For the full time period, (1990-2011) the total number of events across the entire region of 147 provinces (including all five countries) amounts to 1,036 actual event counts. Correlations for these events shall be assessed in Chapter six (6). SCAD events occurring in Berber regions (over the five countries) total 358 and are labeled A1, whereas events occurring in non-Berber regions total 678 and labeled B1. To determine the number of events per region for the Berber, A1 is divided over the number of provinces containing Berber: A1/61=358/61=5.87 Similarly for non-Berber provinces we obtain: B1/ 86 = 678/86=7.88. Some difference in conflict between Berber and non-Berber regions is already evident just in comparing these two numbers.
Predictably, removing Egypt’s 492 SCAD counts from the total 1,036 roughly halves the total SCAD for the remaining countries to 544. This is done to determine how much Berber versus non-Berber influence there is on the SCAD counts since Egypt has only one Berber population with no corresponding SCAD counts for those Berber. Without Egypt the Berber incidents per region remain roughly the same, 5.93 against 5.87 when including Egypt, because Egypt accounts for only two (2) events involving a Berber province (Matruh), neither of which occurred in the single Berber ethnic area (Siwa).

Figure 4.3 below shows the incidents per region 1990-2011 for non-Berber provinces including (B1) and excluding (B2) Egypt we see a drop from 7.88 to 3.13 counts—a significant drop. Without Egypt’s 492 SCAD events, and looking only at what is the traditional ‘Maghreb’, i.e. the region from Morocco on the Atlantic and across to the Libyan-Egyptian border, the drop shows that the non-Berber populations of North Africa of the traditional Maghreb initially appear to be less reactive. As just mentioned, the A1 and A2 values for provinces containing Berber populations remain essentially the same because the difference is only 2 counts over a single province (A1: 358/61=5.87; A1:356/60=5.93).

### Table 4.2

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**Sources:** Generated using Ethnologue ethnic population data and ethnic map for the North African region which was then projected onto GIS mapping software to obtain the ethnic population totals. Non-Berber data was obtained from City Population.de.
Table 4. Berber and non-Berber regions using Ethnologue data and map.

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<th>No. non-Berber prov. (no Egypt)</th>
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<tr>
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<td>10</td>
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<tr>
<td>TOTAL</td>
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**No. of SCAD events 1990-2011 Nationwide**

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<td>B1</td>
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**No. of SCAD events 1990-2011 (no Egypt)**

<table>
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<th>SCAD in non-Berber prov</th>
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</thead>
<tbody>
<tr>
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<td>B2</td>
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</table>

**Incidents per region 1990-2011 (including Egypt)**

| A 1 / no. Berber prov | 5.87 |
| B 1/ no. non-Berber prov | 7.88 |

**Incidents per region 1990-2011 (NOT including Egypt)**

| A2 / no. Berber prov | 5.93 |
| B2 / no. non-Berber prov | 3.13 |

**Sources:** Generated using Ethnologue ethnic population data and ethnic map for the North African region which was then projected onto GIS mapping software to obtain the ethnic population totals. Non-Berber data was obtained from City Population.de.

**NOTE:** the total no. of SCAD events = 1,036; Egypt’s SCAD=492 without Egypt=544
Fig. 4.1. The Maghreb (Morocco, Algeria, Tunisia, Libya) showing primary Berber populations and SCAD data (1990-2011). Due to space constraints map is distorted and Egypt is not visible. 

Sources: Author’s map with data from Ethnologue and SCAD.
CHAPTER 5
CURRENT EVENTS IN THE REGION

What follows in a brief account of the region’s SCAD counts as they related to news events in the region over the period 1990-2011 so as to conceptualize how these protest, demonstrations and other low-level social conflict events, though less violent than coups and wars are nevertheless critical in instigating social change. Though the general purpose of this paper is to determine low-level social conflict events within areas of Berber ethnicity, an overview of each country is first necessary to better contextualize the SCAD events in the national context. A brief overview of recent events is given, followed by an outline of socio-economic and socio-political events for the countries during the period of the study, 1990-2011.

This chapter gives a superficial feel for social conflict for the twenty-one year time period for the five countries involved, so as to better understand even some of the many factors behind social conflict in this region, and also to see how these same factors might relate to yet others not mentioned here. What it surely illustrates, however, is how interdependent are these various factors, and how actually pinpointing any specific cause for occurrences such as social conflict can is at once daunting, and possibly dubious. Bearing this in mind, it should be stressed here that this analysis seeks only to explore possible contributing factors to social unrest and in no ways seeks to determine cause and effect. This is an exploration into the effect of ethnic groups and how they relate to many causes within a socio-political and socio-economic system. It may be that social conflict is not ethnically driven. Determining whether or not ethnicity drives social conflict in North Africa is outside the scope of this analysis, instead the goad here is to see if there exists a correlation between the various locations of known ethnic homogeneous groups and a significant incidence of social conflict.
Across the continent from West to East (Figure 5.1) the clusters of greatest activity occur most generally around the northern regions of Morocco, Algeria, and Tunisia, and resume again at the Nile in Cairo and Alexandria. The analysis first covers the Maghreb, then moves east as the Berber distribution lessens in density across the continent with the least numbers occupying eastern Libya and western Egypt, the latter occurring just outside the Libyan border and consisting of only a handful. Once the population numbers are tabulated, a correlation with social conflict in the locations principally inhabited by these groups is then tested.

The indigenous people of the Maghreb have a long and varied history of rebellion and dissent from ancient times extending well into the current era. Though the Phoenicians were first to settle the area, their cultural imprint upon the indigenous Berber was different in nature and extent from that of the later Greeks, Romans, and subsequent arrivals, but all have left lasting impressions on Berber populations and changing social and cultural dynamics, ultimately changing aspects of civilization in the region. In looking at the low-level social conflict in known Berber regions, and comparing these counts to the non-Berber ethnic areas, some impression of differences in social conflict between Berber and non-Berber areas shall be assessed to determine if Berber ethnic areas are more socially conflict prone than non-Berber areas to see if this characteristic of ‘rebellion’ has carried forward overtime as a low-level conflict dynamic.

**SCAD over the five countries**

The following table, Table 5.4, shows the five countries of the region together with SCAD events and population statistics. From the table we see that by far the greatest number of SCAD social conflict events over the twenty-one year period (1990-2011) have occurred in Egypt (491), dwarfing Algeria’s second (261) by 230 events. Morocco follows with 137, then Libya and Tunisia are close at 77 and 70 respectively, and for a total of 1,036 events.  Looking at
population and population density, however, (Map 5.2). The black areas around all five capital cities are plainly visible lightening progressively as population density decreases, and finally decreasing to white in very sparsely populated areas such as across the desert regions in the south. The white expanse clearly demarcates the Sahara, crossing the continent from east to west, but visible also in this map is a persistent darker grey coloring along the Mediterranean where lie the most habitable zones inhabited by 80% of the region’s population. Just below the littoral, on a transverse from southwest Morocco to northwest Tunisia lie the Ante-Atlas, the High-Atlas, the Saharan-Atlas, and the Aurès, with the High-Atlas, Middle-Atlas and the Tell ranges just superior to these features. Though the populations within these mountain regions are more scant, historically they have been greatly significant in the North Africa’s history. This is the area most densely populated today by Berber tribes.

In more accessible regions along the coast, such as in the Kabyle of the north coastal mountains of Algeria, these mountain areas show an almost exclusively ethnic Berber population, whereas major cities are mostly multi-ethnic and multi-national as expected from most large urban areas. Though Berber are known to inhabit the major cities and major population areas, no actual data for their numbers is available outside ethnic areas. Other Berber-dense areas can be seen in the triangle formed by the cities of Algiers, Tunis and southeast along the coast to Tripoli. This triangle, together with Morocco’s Riff Mountains and Libya’s Tripolitania and Cyrenaica regions contains most of the Berber population under analysis here.
Fig. 5.1. Map of Maghreb countries, provinces with SCAD count totaling 1,036 (1990-2011). Egypt country name is hidden beneath the SCAD number circles (right). Also note map distortion necessary to visualize SCAD events concentrated in the north of continent where provinces are small but numerous.

Source: Author’s map using SCAD data.
News and the national perspective

SCAD events shall first be looked at from the national perspective. This will give an overall view of how much low-level social conflict was ongoing during 1990-2011 and will allow for conceptualization of the number of SCAD events on a country-by-country basis and in the context of socio-political events for that time period. For example, the number of low-level conflict events (SCAD) in Algeria for 1990-2011 would seem disproportionally large unless taken in context of that country’s long civil war which spanned most of those 21 years. Using the SCAD events in the context of civil wars, provincial or regional disruptions, and other events effecting countries individually enables a regional conceptualization – seeing the North African region as a system if dynamically related parts. Countries are seen in context of the news media briefs and events corresponding to the appropriate time period.¹

Algeria

From the table shown below, Fig. 5.2. Algeria experienced 261 low-level conflict events (SCAD) from 1990 to 2011, an average of about 12 events per year and in that sense quite low compared with the other countries. These events were percolating regularly until 2001 when a sudden surge occurs to about 45 events (see Fig. 5.1. SCAD 1990-2011, (x) by country: Algeria (red) Egypt, (blue , Libya (green), Morocco (purple), Tunisia (turquoise) Algeria graph is blue), and again in mid-2011 when events peaked again at 42, also coinciding with Tunisia (41 events). Both Algerian events coincide with populous uprisings at the time: In April-May of 2001 demonstrations and clashes occurred between security forces and protesters in the Kabyle region after which major concessions were made to Berber language status, and again in mid-

2011 when major protests occurred over food prices and unemployment, during which several mortalities occurred and substantial violent encounters ensued with the police. When food prices were then cut by the government just following the events of 2001, protests diminished accordingly as also seen on the graph (Fig. 5.2). Lower but significant peaks in 1992 and 1998 (22 counts and 15 counts respectively) are explained by the increase in violence as the Groupe Islamique Armé emerges following the assassination of Boudiaf by an Islamic radical (1992), and in 1998 when President Zeroual announces his intention hold early presidential elections.

**Source:** Author’s graph using data from SCAD database.
Fig. 5.2. Map is author’s creation using population density map of the Maghreb using CIESEN data, 1990-2011. Geographic distortion necessitated to better visualize the very few areas of high population concentration (black and darker grey).

Source: Author’s map using CIESEN data.
Source: SCAD data

Egypt

Egypt is presented here as a basis of comparison between the Arab Middle East and the Maghrebi West. Since it is considered both politically and socio-economically as part of the Middle East, the Mashriq, rather than comprising part of North Africa’s Maghreb, looking at Egypt’s events will give context to the more Berber countries to its west. Egypt’s single Berber community lies in the far west next to the Libyan border.
Over the 21 year span, Egypt\(^2\) shows high-points in mid-2005, mid-2008, and a rapid surge in 2009 lasting until 2011 (see Fig. 5.1) Low peaks begin in 1992, recur in mid-1995, with relative quiescence from 1993 to 1994 and again between 1996 and 2003. A rough guess would be that the 1992 rise was due to President Mubarak’s third six-year term in office, having promised to leave after just two terms. Doubtless protests would have ensued: a foreshadowing of what was to occur after an assassination attempt after the announcement that he would serve a fourth term of office. The 1995 upsurge may have been due to Egyptian antagonism towards Pakistan following the attack on the Egyptian embassy in Islamabad. The large number of civil unrest events in 2005 may have been due to activists mounting anti-government demonstrations. 2008 events likely resulted from massive arrests lasting over a month related to the sentencing of Muslim Brotherhood members following an investigation into the MB’s funding practices. The surge of public outcry in 2009 may have been due to a number of factors to occur that year but was most likely due to the massive protests when Egypt and Algeria qualified for the 2010 FIFA World Cup when qualifying matches went awry leading to diplomatic tensions between the two countries. In 2010, quick on the heels of the January 2010 clashes with Copts, was to dwarf those of the two preceding and began the anti-Mubarak protests and reaching a frenzied pitch in 2011 with protests coming from all quarters, and culminating in February of that year Mubarak with stepping down, prematurely, and the army council taking temporary charge.

Beginning about 2005 a marked change in the slope (see Fig. 5.3) may have been caused by anti-government demonstrations for pro-reform and opposition measures or perhaps that

combined with the successful referendum vote regarding the constitutional amendment allowing multiple presidential candidates.

**Libya**

Between 1990 and 1992 (Fig. 5.1) Libyan public unrest might have been incurred by UN sanctions on Libya regarding the handover of Libyan suspects over the Pan-Am Lockerbie affair (1988). The sudden jump in 1996 may be due to Qadhafi’s having expelling the 30,000 Palestinians in protest of the Oslo accords between the Palestine Liberation Organization (PLO) and Israel.

The trend remains quite low at about 5 events per year until another rapid rise beginning in 2008, also reaching 16 events, and with a steep slope culminating in 2011 (Fig. 5.1). Early events in 2008 returned Libya to respectability in the UN, assuming the one-month rotating UN Security Council presidency after decades as the pariah of the West. In the second half of that year Libya and the US committed to victim compensation for each other’s bombing attacks. The following month Italy’s Prime Minister Berlusconi apologized to Libya for colonial era war damage, signing a compensatory five billion dollar investment deal, and in that same month US Secretary of State Condoleezza Rice visited to announce what the deemed a "new phase" in US-Libyan relations.

None of these events resulted in social conflict events of any importance, but in February 2011 the anti-Gaddafi uprisings began in Benghazi, spreading rapidly across the country. What started as the arrest of a human rights campaigner by Libyan authorities ended with the overthrow of Gaddafi’s forty-two year rule and the upward slope can be clearly seen on

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the graph (Fig. 5.1, Libya is green). The steep upward slope explains the sudden jump in protests, demonstrations.\textsuperscript{4} What began in Benghazi quickly spread across Libya. Though the incident appeared initially to be insignificant, protests unleashed a brewing hostility in the country, not doubt instilled by the Tunisia’s revolt from December of the prior year as seen in on the same graph (turquoise on graph) and parallels Algeria (blue on graph) in SCAD events for that time period. The social conflict uptick for Libya after 2008 represents an increase of about 10 protests per year from mid-2008 until 2011 after which data collection stops.

**Morocco**

Morocco\textsuperscript{5} appears quite steady up to about 2000, averaging less than 5 civil unrest events during that time (Fig. 5.1, Morocco is purple). The seven year period between 2000 and 2007 shows particular upticks about every two years from 2000-2007, followed by a subsequent doubling of events in 2010, very possibly in response to the Arab Spring events elsewhere in North Africa. The 2007 increase was very likely due to Morocco’s response to Spain’s King Carlos visiting the island cities of Ceuta and Melilla off Morocco’s coast. Melilla responded to his visit with a massive demonstration of support and Morocco countered with equally massive demonstrations. Both Spanish cities are independent entities and form part of Málaga province, directly across the Mediterranean but have long been viewed by Morocco as part of that country because they are located on the Moroccan mainland.

The 2010-2011 increase has greater slope and coincide with large protests in Rabat in the early part of 2011 in support of the Arab Spring. Massive public outcry in response King Mohammad

\textsuperscript{4} Ibid.

VI insufficient constitutional reforms is also evident in this sharp uptick around 2010. Overall Morocco seems quite steady the understandable increase in unrest during the era of constitutional reform and during the response to the Arab Spring.

**Tunisia**

Tunisia\(^6\) appears a steady state from 1990 to 2010, with unrest values averaging below \(^5\) per year, making the sudden tremendous increase of 42 events per year all the more remarkable and perhaps also reflecting the newly exposed, deeply rooted economic problems (Fig. 5.1. Tunisia is turquoise) The socio-economic problems inherent in President Ben Ali’s government would reverberate across the entire Middle East and North African in the space of months and the aftermath of Tunisia’s unrest continues to rock the entire region to this day.

Before 2010 the graph shows little to no activity. This is all the more remarkable when compared to other countries whose events show remarkable oscillations. Yet at the turning point in Tunisia in 2010 every Maghreb country responded in kind. Egypt’s response was far different and appears to be part of a more gradual increase beginning in 2009.

According to this data, the most interesting observation across the five countries is the Arab Spring beginning in 2010 to which all four Maghreb countries responded in unison. Although Egypt had response in 2010, social conflict events in the country were increasing (Fig. 5.1).

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### SCAD Events & Population, unemployment, GDP statistics

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</tbody>
</table>

**Sources:** Author’s table. Data for SCAD count from SCAD database. Population and area data from City Population.de. Population density data as calculated from the prior columns of population and area. SCAD/M: value calculated from the prior column. GDP/capita and unemployment data from UN Data.org Population growth and urban population growth (2008) and from Trading Economics.com.

**Note:** For this chapter alone the SCAD data are not nationwide SCAD events; instead these are SCAD events which occurred in particular provinces/counties, but are still derived the shapefile map using the Ethnologue source map in other chapters.

### Population

Country population statistics in Table 5.4 shows Egypt, with a population of 81 million, clearly ranking first, followed by Algeria with less than half that size. With population density taken into account, however, Egypt still ranks first (81.67 inhabitants/km²), with a much smaller sized Tunisia (69.05) is followed by Morocco (63.75) and Algeria lags behind (12.07) and Libya shows a mere 3.20.

In terms of SCAD counts per million of population Algeria ranks first (8.97), followed by Tunisia (6.56) and Egypt (6.03). Morocco is half Algeria’s count (4.49) and Libya ranks last at 1.36. The on-going civil war from 1991-2002 accounts for Algeria ranking first for SCAD, a time when protests typical of SCAD would have been more likely to occur. Algeria’s SCAD activity is therefore more probably related to civil war and less likely to be related to population density. Tunisia ranks second in terms of SCAD/million and population density, but the graph is flat until
2010. Only after that does the slope double, coinciding with the sudden accumulation of SCAD which began the Jasmine Revolution. The uptick in events was caused by rising tensions from December 2010 when protests broke out over unemployment and political restrictions which rapidly spread across Tunisia. A month later, January 2011 President Ben Ali’s régime was overthrown and the first popular revolution of the Arab Spring began. Before that time Tunisia was event-free. In February 2011 Morocco’s slope (purple line) doubles synchronously, coinciding with the thousands who rallied in support of the Tunisians. Protestors in Rabat and other Moroccan cities called for political reforms and a new constitution to curb the powers of King Mohammad. Months later when demonstrations continued unabated, the King tried to placate the masses with constitutional reforms. As seen in the following cumulative (cum.) graph, Morocco’s turning point coincides nicely with those of Tunisia and Algeria: from 2010 to 2011 the increase in Moroccan protests and doubled from 136 to 272.

Source: Author’s graph using data from SCAD database.
Egypt’s inflection point occurred much earlier – between 2003 and 2005 SCAD events in Egypt jumped from 129 to 223 (red line). This is the beginning of the reformist and opposition activists mounting anti-government demonstrations, with events lasting from February to about May of 2005. December of 2005 ended with clashes between police and supporters of the opposition Muslim Brotherhood when the Egyptian Parliamentary polls closed.

Of the Five nations, Libya (green line) showed the least SCAD activity and only a slight uptick coinciding with the Arab Spring and very different from other Maghreb countries. Because Gadhafi’s remained in power in protests were minimized until about August keeping the line flatter. Unfortunately the data ends in 2011 so the later events of 2011, including continued riots and the data showing these events, including the outbreak of civil war, are not visible on the graph.

**Other economic factors**

Gadhafi ‘strongman’ régime is no doubt responsible for a large part of Libya’s unresponsiveness as seen on the graph (Fig. 5.3), but neighboring Tunisia and Egypt also had longtime dictators in place during that time period. One component which sets Libya apart regionally is her per capita GDP⁷ (Fig. 5.4), and when compared to her cohorts in this category, Libya appears not to have been suffering in the least, something that would certainly explain such low SCAD events - since contented people tend not to demonstrate or protest. Libyan per capita GDP ($USD 16,221) in 2008 had seen little fluctuation from at least 2005, and what change there was, was always upward. According to this data, and regionally speaking, Libya’s

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⁷ UN Data. ([2008] for all five countries] [http://data.un.org/Data.aspx?q=Algeria+GDP+&d=SNAAMA&f=grlD%3a101%3bcurrID%3aUSD%3bpcFlag%3a1%3bcrI D%3a12](accessed July 15, 2013). Interestingly, other sites have different numbers for all five countries. For the same year, one such source showed Algeria at 3,063, Egypt at 1,382, Libya at 8,542, and Morocco at 2,113 and Tunisia at 3,537: [http://www.tradingeconomics.com/egypt/gdp-per-capita](http://www.tradingeconomics.com/egypt/gdp-per-capita).
per capita GDP outpaced her neighbors quite extraordinarily, exceeding Egypt 7 fold, Morocco by almost 6, Tunisia by almost 4, and Algeria 3 fold. This high per capital GDP might be explained by Libya’s large surface area and hydrocarbon reserves, a resource she shares with Algeria. It is possible that because of the 20 year civil war Algeria was less able to deliver on these goods compared to a more quiet, though thoroughly corrupt, Libya. The two countries having relatively the same surface area (1.8 vs 2.4 million km2), and both export hydrocarbons at about 97% of capacity. But Libya certainly exceeds even Algeria for GDP. Perhaps the difference is due to Algeria’s civil war disrupting the economy versus Libya’s ‘pax Gadhafi’ when any social demonstration was met with immediate jailing. This would account for Libya’s greater relative wealth and low social conflict levels: national wealth alone usually has a diminishing effect on social conflict.

**Unemployment**

The next consideration is annual percent unemployment based on 2008 figures. All five countries cluster relatively closely between 9.1% (Egypt) and 13% (Libya) and the year for the unemployment figures was 2008 for all but Libya where 2006 was the closet figure available. It is interesting that the wealthiest of the five countries, in terms of per capita GDP, has the highest unemployment – Libya at 13%, yet SCAD events there are not increasing as in the other Maghreb countries. Perhaps some relationship exists between high regional GDP and the job market in Libya, but one can only speculate.

Tunisia’s high unemployment was already seen to have disastrous consequences - it was unemployment, particularly in Tunisia’s less-than-25 year olds, that initially sparked the Arab
Spring. Couple the unemployment with President Ben Ali’s long-standing corruption and the December 2011 foment can be explained.

Looking again at Algerian 11.8% unemployment 2008, which hadn’t fluctuated by much in that relative time period, we see how the civil war continued to take its toll as young people in particular still remained unemployed. Oddly, though unemployment had been a major instigator of the war, even as lately as lately as 2004 Algeria’s unemployment was still hovering at 17.7% and had at one time exceeded 20%. Taken in perspective, therefore, the 11.8% would be seen by the Algerian population as a real improvement – certainly an improvement over 2004 and 2005. But Algeria’s high SCAD was driven by more than unemployment; there was also the Islamist component which was simultaneously driving up levels of discontent.

**Percent (%) urban population growth**

Yet another component of Algeria’s high SCAD numbers might the annual % urban population growth (Fig. 5.4)9. All data are from 2008, with Algeria leading at 2.51%, followed by Libya at 2.31% and Egypt at 1.87%. Once again Algeria tops the list. This would appear to indicate that in Algeria, more so than in the other countries, people were converging into the cities in search of work, thereby increasing the competition among job-seekers which might well explain increased SCAD counts compared to other countries.

While Libya was experiencing almost the same urban growth rate (2.31%) as Algeria (2.51%), it did so without any increase in SCAD counts during that time period. It is possible that eventually...

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9. F. Caselli, and I. I. Coleman, “On the Theory of Ethnic Conflict,” WJ (2006), NBER Working Paper Series 12125 (accessed August 14, 2013). Socially heterogeneous societies without democratic institutions are more prone to violent conflict, claim both Rodrik (1998) and Caselli and Coleman (2006). Their model highlights the way in which lack of representative political institutions and “latent” social conflict affect such heterogeneous populations. Fractionalization, however, does not necessarily affect coups and riots, since coups require different organizational advantages. Lower levels of violence also tend to be more random and lack coherent organization.
the urban growth needed reach a critical mass before exploding, but it is far more likely that the Gadhafi régime was keeping a lid on SCAD events. No doubt the rebellion that finally exploded in Benghazi early 2011 was the accumulation of long pent-up socio-political tensions. Perhaps the arrest of the human rights campaigner in February 2011 was simply the straw that broke the camel’s back.

**GDP**

We have seen that Algeria has the second largest number of conflict events after Libya. Adopting the same procedure as with Libya, we see that in terms of GDP she outperformed both Egypt and Morocco by about half, and by 2008 was at par with Tunisia. As mentioned earlier, the country’s civil war must account for part of a lagging GDP, particularly when compared with Libya which, at the time, was relatively stable. In about 1994, three years into the revolution, Algeria hit a relative nadir in GDP (1.5), but despite these shortcomings maintained a steady climb\(^\text{10}\) until the global recession in 2008 at which time GDP reached 4.8 as (Fig. 5.4) and then declined precipitously. If we consider only the 166 conflicts which occurred during the 11 year span of the civil war, and remove the 49 of these events which occurred in the immediate surrounds of Algiers that leaves us with 117 events which is about 11 events per year for the area excluding Algiers, a not excessive number for a war-torn country. Now the almost 12% unemployment: From 1990’s Algeria had experienced total unemployment in the range of 23.2-29.8% (1993, 2000) with most of the unemployed being among young males, and of the latter about 60% having only a primary education\(^\text{11}\). This is an interesting point since the type of

\(^{10}\) The World Bank


\(^{11}\) This is an approximation based on the World Bank site data which lists the Unemployment with primary education, % male figure for 2001 as 66.2%. http://search.worldbank.org/data (accessed July 2, 2013).
social conflict we are looking at here, such as demonstrations and protests, is more typical of higher levels of education.

Bearing in mind that we are looking at 2008 figures for all these comparisons, we see Egypt has a calculated value of 6.03 SCAD /M per million which pales when compared to Algeria (8.97). Egypt’s per capita GDP compares favorably with Morocco (2,184 versus 2,871 respectively), but is only half that of Tunisia (4,317), while in unemployment Egypt and Morocco continue to compare (9.1 versus 9.7 respectively), Tunisia exceeds both by 25%. From the data here, none of the factors considered appear to explain the high SCAD number in Egypt, with the possible exception of population density (81.7 inh/km2), though even that doesn’t seem likely since the number includes vast open areas of uninhabitable desert, but holds for all five countries. Perhaps Egypt is better explained in terms of ethnic diversity which shall be seen later in this paper.
CHAPTER 6

CORRELATION BETWEEN SCAD, SCAD/M AND OTHER VARIABLES

This chapter explains the correlations between SCAD and SCAD/M across seven variables to determine if Berber communities are more susceptible than non-Berber communities to these low-level conflict events. For background information and methodology please refer to the introduction and Primary Sources on page 1 of the thesis. All population data and areas used in this paper should be seen in context of how the data was imported into the mapping software and subsequently used to generate the following analysis. Data was imported into PostGIS (PostgreSQL with GIS extensions) and reports were generated using psql and then exported to spreadsheets for further analysis, while the visualization maps were generated using QGIS\(^1\) linked to the PostGIS database.\(^2\) The initial data was taken from the two Ethnologue maps for the Maghreb: the first map covering Morocco, Algeria, and Tunisia and the second covering the east portion of North Africa – Libya and Egypt. The image maps were then geo-referenced and shapefiles created by tracing the ethnic areas on each map, and Ethnologue population figures were added for each identified Berber (ethnic) area. Shapefiles were then imported into the PostGIS database. The ESRI ArcGis shapefile was used to create provincial shape files and though not the most recent in terms of provincial boundaries, was nevertheless

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1. QGIS (previously known as "Quantum GIS") is a free, open source desktop geographic information systems (GIS) application that provides data viewing, editing, and analysis capabilities.

used because of greater accuracy for the five countries concerned. To simplify calculations, the provincial boundaries are assumed to be static over the period of the SCAD events. For future studies perhaps dynamic boundaries would be available which would better model the data.

The purpose of this chapter is to find a relationship between low-level social conflict (SCAD) and Berber populations in the countries of the Maghreb. After comparing results it was found that the best indicator for SCAD in this study was SCAD per million (henceforth SCAD/M) rather than SCAD. After running all the correlations and examining p-values, SCAD/M was found to correlate with the following variables: 1. *number of Berber groups in a province*; 2. *provincial population*, and; 3. *increased provincial area*. Correlations were run across all five countries, and what follows is an analysis of the findings, beginning with the two positive associations.

The hypotheses are as follows and discussion is found in the text. All values are tabulated in Table 6.1.

**Ho**: There is no association between # *Berber groups* and the incidence of SCAD/M  
**Ha**: There is a positive association between # *Berber groups* and the incidence of SCAD/M

The p-values are one-tailed and tested at the 5% level (α=0.05). Results are positive for Algeria, Tunisia and Libya, indicating a positive relationship between the # of *Berber groups* and SCAD/M. Discussion follows and results are tabulated in Table 6.1.

**Ho**: There is no association between *provincial population* and the incidence of SCAD/M  
**Ha**: There is a positive association between *provincial population* and the incidence of SCAD/M

Testing at the 5% level indicates positive association (reject Ho) between *provincial population* and SCAD/M for Morocco, Algeria, Tunisia, Libya, and Egypt.

**Ho**: There is no association between *provincial area* and the incidence of SCAD/M  
**Ha**: There is a positive association between *provincial area* and the incidence of SCAD/M

Testing at the 5% level indicates positive association between *provincial area* and SCAD/M (reject Ho) for Algeria, Tunisia, and Egypt.
**Correlation formula:**

All correlations were done using Microsoft Excel which uses the following *Pearson r* formula:

\[
\text{Correl}(X, Y) = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}
\]

Where \( \bar{x} \) and \( \bar{y} \) are the sample means over the array of numbers array 1 (x) and array2 (y).

Seven correlations are reviewed for the five countries: 1. provincial population; 2. provincial area; 3. provincial population density; 4. Berber population; 5. Berber population density; percent provincial Berber and; 6. Berber language groups. Each correlation was identified with respect to SCAD counts per million (henceforth SCAD/M). Data for provincial population and provincial area were obtained from *citipopulation.com*\(^3\), and the population density information was then calculated. The Berber population density and the number of Berber language groups was obtained from Ethnologue\(^4\). The correlation tables are discussed in further detail in the appropriate section in the Appendix. The measure of correlation used is Pearson's coefficient of correlation, denoted ‘r’.

**Correlations**

Throughout this paper correlations between SCAD/M and the specified individual variables (area, population, population density, number of Berber language groups, Berber population, Berber population percent, et cetera) are first discussed by provincial area and population and then by country, from east to west across the continent.

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Table 6.1 Table of correlations between SCAD and SCAD/M and 7 variables over five countries (Morocco, Algeria, Tunisia, Libya, and Egypt.

<table>
<thead>
<tr>
<th>n=number of provinces</th>
<th>SCAD/Million correlation</th>
<th>SCAD/Million p-value</th>
<th>SCAD correlation</th>
<th>SCAD p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Provincial Berber population percent (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morocco incl.c.t.</td>
<td>16</td>
<td>-0.281</td>
<td>0.146</td>
<td>-0.146</td>
</tr>
<tr>
<td>Morocco excl. c.t.</td>
<td>14</td>
<td>-0.103</td>
<td>0.363</td>
<td>-0.316</td>
</tr>
<tr>
<td>Algeria</td>
<td>48</td>
<td>-0.166</td>
<td>0.130</td>
<td>0.127</td>
</tr>
<tr>
<td>Tunisia</td>
<td>24</td>
<td>0.085</td>
<td>0.346</td>
<td>-0.056</td>
</tr>
<tr>
<td>Libya</td>
<td>32</td>
<td>-0.184</td>
<td>0.157</td>
<td>-0.091</td>
</tr>
<tr>
<td>Egypt</td>
<td>27</td>
<td>0.126</td>
<td>0.266</td>
<td>-0.072</td>
</tr>
<tr>
<td><strong>Provincial Berber population</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morocco incl.c.t.</td>
<td>16</td>
<td>-0.201</td>
<td>0.228</td>
<td>-0.177</td>
</tr>
<tr>
<td>Morocco excl. c.t.</td>
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<td>0.156</td>
<td>-0.200</td>
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<tr>
<td>Algeria</td>
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<td>0.067</td>
<td>0.130</td>
</tr>
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<td>Tunisia</td>
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<td>0.257</td>
<td>-0.051</td>
</tr>
<tr>
<td>Libya</td>
<td>32</td>
<td>-0.184</td>
<td>0.157</td>
<td>-0.103</td>
</tr>
<tr>
<td>Egypt</td>
<td>27</td>
<td>0.126</td>
<td>0.266</td>
<td>-0.072</td>
</tr>
<tr>
<td><strong>Provincial Berber population density</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morocco incl.c.t.</td>
<td>16</td>
<td>-0.277</td>
<td>0.149</td>
<td>-0.051</td>
</tr>
<tr>
<td>Morocco excl. c.t.</td>
<td>14</td>
<td>-0.271</td>
<td>0.174</td>
<td>-0.079</td>
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<tr>
<td>Algeria</td>
<td>48</td>
<td>-0.176</td>
<td>0.116</td>
<td>0.185</td>
</tr>
<tr>
<td>Tunisia</td>
<td>24</td>
<td>-0.034</td>
<td>0.437</td>
<td>-0.069</td>
</tr>
<tr>
<td>Libya</td>
<td>32</td>
<td>-0.181</td>
<td>0.161</td>
<td>-0.081</td>
</tr>
<tr>
<td>Egypt</td>
<td>27</td>
<td>0.126</td>
<td>0.266</td>
<td>-0.072</td>
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<tr>
<td><strong>Number of provincial Berber groups</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Morocco incl.c.t.</td>
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<td>-0.365</td>
<td>0.082</td>
<td>-0.273</td>
</tr>
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<td>Morocco excl. c.t.</td>
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<td>0.223</td>
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<td>0.015</td>
<td>0.013</td>
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<td>0.028</td>
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<td>32</td>
<td>0.333</td>
<td>0.031</td>
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</tr>
<tr>
<td>Egypt</td>
<td>27</td>
<td>0.126</td>
<td>0.266</td>
<td>-0.072</td>
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<tr>
<td><strong>Provincial population</strong></td>
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<td>0.337</td>
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<td>Morocco excl. c.t.</td>
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<td>0.014</td>
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<td>Algeria</td>
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<td>0.001</td>
<td>0.069</td>
</tr>
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<td>Tunisia</td>
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<td>-0.580</td>
<td>0.001</td>
<td>0.446</td>
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<td>0.000</td>
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<td><strong>Provincial population density</strong></td>
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<td></td>
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<td>0.241</td>
<td>0.001</td>
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<td>Tunisia</td>
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<td>-0.012</td>
<td>0.478</td>
<td>0.857</td>
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<tr>
<td>Country</td>
<td>Province</td>
<td>Area (km²)</td>
<td>SCAD/M Density</td>
<td>Conflict</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>----------------</td>
<td>----------</td>
</tr>
<tr>
<td>Libya</td>
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<td>0.047</td>
<td>0.399</td>
<td>0.973</td>
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<tr>
<td>Egypt</td>
<td>27</td>
<td>0.350</td>
<td>0.037</td>
<td>0.644</td>
</tr>
</tbody>
</table>

Provincial population area

<table>
<thead>
<tr>
<th>Province</th>
<th>Province</th>
<th>Area (km²)</th>
<th>SCAD/M Density</th>
<th>Conflict</th>
<th>SCAD/M Density</th>
<th>Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morocco incl.c.t.</td>
<td>16</td>
<td>0.207</td>
<td>0.189</td>
<td>-0.316</td>
<td>0.117</td>
<td></td>
</tr>
<tr>
<td>Morocco excl. c.t.</td>
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<td>0.239</td>
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<td>Algeria</td>
<td>48</td>
<td>0.564</td>
<td>0.002</td>
<td>-0.099</td>
<td>0.252</td>
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</tr>
<tr>
<td>Tunisia</td>
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<td>0.250</td>
<td>0.002</td>
<td>-0.052</td>
<td>0.405</td>
<td></td>
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<tr>
<td>Libya</td>
<td>32</td>
<td>0.538</td>
<td>0.084</td>
<td>-0.129</td>
<td>0.241</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>27</td>
<td>0.207</td>
<td>0.002</td>
<td>-0.083</td>
<td>0.170</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>147</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on SCAD data 1990-2011 (see earlier footnotes on SCAD dataset).

a p-values are 1-tailed; α=0.05
b not the total number of Berber groups in the province, but the correlation between the number of groups and the SCAD and SCAD/M

Provincial area

Provincial area for each country is tabulated in square kilometers (km²) and correlated against the SCAD/M, Algeria having forty-eight provinces, Egypt twenty-seven, Libya thirty-two, Tunisia twenty-four and Morocco sixteen, including its two contested territories in the south.

In four of the five countries, provincial SCAD density correlation was found to be positively correlated with provincial area with Morocco being the exception. Tunisia (r=0.564) and Egypt (r= 0.538) are the most strongly correlated both showing a strong increase of SCAD/M with increasing provincial area. Algeria also shows a strong, positive correlation (r=.404), though lesser in strength than Tunisia and Egypt (see strength correlation chart above). Libya’s correlation to area is weakly positive(r= 0.250), showing a weak tendency of low-level conflict to increase with province size and making provincial size a weak indicator of SCAD/M activity.

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6. Please recall that all correlations refer to SCAD/M against the particular variable mentioned. When correlations do not refer to SCAD/M the notation shall be made accordingly.
Morocco’s correlation of area to SCAD/M is weakly negative (r= -0.236), showing only a slight tendency of decreasing SCAD/M activity as provincial area increases. Interestingly, removing Morocco’s two contested territories, Laayoune-Boujdour-Sakia-el-Hamra and Oued-ed-Dahab-Lagouira, containing 2666.6 and 231.4 SCAD/M counts respectively, brings this area correlation more in line with other Maghrebi countries.

Having removed Laayoune-Boujdour-Sakia el Hamra and Oued-ed-Dahab-Lagouira, the correlation jumps from negative to positive, from r= -0.236 to r= 0.207 (see chart 6.1) bringing it more in line with the other countries, and though this ‘amended’ correlation is weak compared to neighboring Algeria’s (r=.4044), it is nevertheless more consistent with Libya and Algeria, and to the extent that it is positive, also with Egypt. Despite this finding however, the correlation including the disputed areas shall be used, chiefly because policing and administration - principle constraints to low-level conflict - are provided by the Moroccan government. It would be reasonable to conclude, therefore, that Morocco’s area to SCAD/M correlation is overall consistent with the remainder of the Maghreb. Provincial area and population density work together, increasing area means decreasing population density which, counter intuitively, drives up the SCAD/M counts. Morocco’s two contested areas drive up the SCAD/M uncharacteristically for the Maghreb - though these ‘provinces’ rank as the nation’s least (15th and 16th) for population density they rank 1st and 2nd for SCAD/M. Third largest in area is Guelmin-Es-Smara which also ranks third for SCAD/M (53.4 counts for the time period), and although this is not a contested area, it does lie in close proximity which might well explain the increased conflict activity.
Generally, provincial area in North Africa increases apace with low-level conflict. But, possibly because Morocco’s provincial area distribution tends to be mostly towards larger sized provinces (a greater number of larger provinces; fewer smaller ones), together with overall low population density in these larger provinces, the opportunity for people to gather for such events lessens considerably when compared to densely populated areas like Grand Casablanca and Rabat-Salé along the Atlantic coast. The chart below shows provincial distribution for the five countries with Morocco (in purple) showing 25% of her provinces (4/16) ranging from 60,000 to 80,579 km². The uniform distribution of the remaining fourteen Moroccan provinces can be seen in purple in the chart below, and range in area from 1,026 to 31,881 km² with corresponding population densities ranging from 1.4 to 3,624.8 inhabitants per km².

Note: Morocco is showing Morocco including/excluding its two contested territories.
Table 6.2. Country provincial area frequency distributions.

<table>
<thead>
<tr>
<th>Country area (km²)</th>
<th>ALG</th>
<th>EGT</th>
<th>LIB</th>
<th>MOR</th>
<th>TUN</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
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<td>2500</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>5000</td>
<td>14</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>10</td>
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<td>5</td>
<td>5</td>
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<td>7</td>
<td>27</td>
</tr>
<tr>
<td>15000</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>30000</td>
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<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>7</td>
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<td>4</td>
<td>11</td>
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<tr>
<td>Totals</td>
<td>48</td>
<td>27</td>
<td>32</td>
<td>16</td>
<td>24</td>
<td>147</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on City Population.de.

**Provincial population**

Without exception, increased provincial population is associated with decreasing SCAD/M throughout the Maghreb and Egypt (Chart 6.3a) with the highest populations (and population densities) occurring mainly in and around the capital cities.

All five countries show negative correlations for population to SCAD/million counts, with Egypt being the strongest ($r = -.619$), and Libya the weakest ($r = -.288$). The entire North African region is predominantly desert with precipitation <100 in. ppn, with even coastal regions getting little
more than <200-300 in. ppnyr\(^7\). In Libya and Egypt in particular, precipitation is limited to a narrow ribbon across the continent, broken only at Tripoli, and again the horn jutting out into the Mediterranean formed by five provinces, from Al Hizam-al-Akhdar to Benghazi to Darnah and ending at the Nile Delta. Habitation necessarily follows precipitation and the only habitable regions from Tunisia to the Nile are those very few just mentioned, all lying in Libya. Nowhere else in this stretch is there a decent foothold for a sizeable population until you reach the Nile delta. Populations in Libya’s interior must therefore be small, with land use optimized by restricting use to shallow grazing and to herding, and the constant movement of animals over the fragile land surfaces. Though small, concentrated populations are evident across North Africa, particularly so in Libya and Egypt and most pronounced in Libya because she lacks the more constant influence of the Nile and relies almost exclusively on rainfall. Overall, this patterning of population along the habitable, rainfall dependent locations along the coast seems to be what ultimately drives the SCAD/M counts: For all five countries SCAD/M decreases with increasing provincial population, yet the increased population areas are those just mentioned along the Mediterranean littoral across the five countries. The data shows that the SCAD/M occurs not in the more densely populated areas but, as already seen with provincial area correlates, in the larger, more sparsely inhabited outlying provinces which invariably lie well inland within the vast deserts and mountain ranges.

Since denser population is restricted to the few habitable areas along the cost, the resulting infrastructure would warrant greater administrative costs and greater policing. In outlying areas, however, restricted financial resources resulting from the lower population

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would restrict infrastructure and minimize policing. This, in turn, would allow for comparative lack of restraint and drive up the conflict levels. In the smaller, more inhabited, and more affluent areas, administrations such as Tripoli and Benghazi would logically tend to concentrate policing and governance efforts where they can be of greatest use - in the few cities. The tighter policing efforts would have the added effect of driving dissidents to the vast outlying deserts and oases where activities are relatively unregulated and where dissent flourishes more readily.

*Egypt*

Egypt is best seen as a counterweight to the Maghreb countries for this work, since its single Berber population is both small and far removed from the country’s population centers, nearly all of which are located on the Nile or in the Nile Delta. Egypt is similar to three of the other counties in the positive correlation between SCAD/M events and area (excepting Morocco), and also similar in the negative correlation of SCAD/M for population for all the countries mentioned here.

Beginning with the highest, Egypt’s five most populous provinces are Al Qahirah (Cairo), Al Jizah (Giza), Ash Sharqiyyah, Ad Daqualiyah and Al Buhayrah. All of these provinces are contiguous and all lie in the Nile Delta, within 200 kilometers of the Mediterranean. Keys factors in these areas are government, policing, and the army, all of which contribute to curbing unrest.

Egypt’s large cities, like Cairo, require permits for public demonstration and protest which must first be obtained from the authorities (police or army8). But these cities are by definition also the most populous. In requiring the permits, authorities are artificially limiting the potential number of protests to those already sanctioned resulting in the most densely

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8. In Egypt in particular the army would be key in maintaining public order.
populated areas, these same large cities, where SCAD/M would be expected to be the greatest actually showing, resulting in artificially low protest numbers as seen in the SCAD/M data. Though the areas are the most populous, SCAD events would be limited to those with permission to protest, strike or demonstrate, making spontaneous civil protest events impossible and driving down the SCAD/M numbers. Only in less populated areas where policing is less pronounced can spontaneous SCAD/M proliferate, areas where restrictions are lessened and such areas are readily found in the larger provinces where populations are widely scattered.

Egypt’s four least populous provinces are also the highest for SCAD/Million counts (see Chart 6.4). All these sparsely population provinces are located away from Cairo and the Nile Delta and all are desert regions.

One of these is on the Nile itself, though almost entirely land-bound, while the others have access either to the Mediterranean (Matruh and Shamal-Sina), and the Red Sea (Janub-Sina, Al- Bahr-al-Ahmar). Land-bound Al-Wadi-al-Jadid lies at Egypt’s southernmost tip and borders north Sudan to the south, Libya to the west, and along the Nile borders Egypt’s smallest yet densely populated provinces: Luxor and Qena. The peninsula which comprises Janub-Sina together with its sister province, Shamal-Sina (South and North Sinai) are vertically contiguous allowing for easy commerce between them and can be viewed as a unit. Al Bahr al Ahmar lies between two bodies of water, the Nile and the Red Sea, both of which contribute to easy outside access into province interior. All four of these provinces contain great ethnic diversity, with Cushidic-Bedawiyet and Nilo-Saharan languages being prevalent in in Al Bahr al Ahmar, and in the Sinai provinces, particularly Janub-Sina (South Sinai) are found the enclaves of Christianity, particularly at St Catherine, the site of early and current Christian communities.

9. Areas receiving less than 100 inches of precipitation per year.
Janub-Sina lies off the Bay of Aqaba and shares borders with Israel, Jordan, and Saudi Arabia, and is located just the other side of the northern apex of the Red Sea. Just off its coast is the contested island of Tinan, an area of great international sensitivity with militaries from the four nations claiming ownership due to the island’s strategic position. Egypt currently holds primacy of the island.

Consistent with all but Morocco, Egypt’s highest positive SCAD/M correlation occurs with provincial area ($r=.538$), demonstrating a strong positive correlation between low conflict events and a tendency for these events to increase as Egyptian provinces increase in area. The largest of these provincial areas occur in Al Bahr al Ahmar (ISO EGBA; area 120,000 km$^2$; SCAD/M =171.3), Matruh (EGMT; 166,563 km$^2$; SCAD=131.10) and Al Wadi al Jadid (EGWAD, 440,098 km$^2$; SCAD 283.6).

All three provinces (governates) face exterior borders: Matruh is exposed to the Libyan desert on its long, porous western border where the Saharan Tuareg range freely. In addition to the Tuareg ranging in from the desert to the west and southwest, Al Wadi al Jadid is also open to a constant influx of Sudanese and Chadians to the southwest. Though the least of the three in in size, Al Bahr Al Ahmar amounts to 1/5 of Egypt’s surface area and has a SCAD/M count of 171.3, the fourth highest count in the nation after Janub-Sina (427.7), Al Wadi al Jadid (283.7), and Shamal-Sina’ (212.7).

Though sharing a border with Israel explains much of North and South Sinai’s civil unrest, the same cannot be said for Bahr-al-Ahmar, where social conflict may perhaps be explained socio-economically. Bordered to the west by the Nile, the province’s eastern border is the Red sea with innumerable ports peppered down the coast beginning at its northern border, some 60 kilometers south of Suez. Traffic Influx from Jeddah (Mecca’s port city) just across the
Red Sea, Yemen further south, and the Sudan, comprising its southern border, are all inexpensive and highly frequented crossings from the province’s main ports and offer ample opportunity for the influx of outside forces to incite local populations. But because low-level conflict, unlike armed conflict, is generally home-brewed, perhaps a more likely explanation for Al-Bahr-Al-Ahmar’s higher SCAD/M count is a combination of high ethnic mix and oil-induced relative wealth.

Particularly to the south, where the province borders Sudan, ethnic composition is more highly diversified, and when coupled with a lower police and military presence (more the case away from Cairo and the larger cities), this may perhaps lead to more conflict, particularly south of Qena (on the Nile) where a number of nomadic tribes are to be found. Land transport is facilitated by a highway running the length of the Red Sea into the Sudan, further enhancing commerce and population exchange in this extremely resource-rich province.

A related possibility for increased conflict count might be due to a substantial Western presence. The oil industry presence began here in the early 1960s and has since generated disproportionate wealth in the area when compared with the rest of Egypt which, coupled with the significant geographic accessibility, might a significant cause in driving up SCAD conflict numbers.

The Sinai region conflict level can safely be attributed to a combination of political strife, high mobility, high ethnic diversity and severe climatic conditions, all of which conspire to make it the most reactive in terms of SCAD/M. The combined Janub-Sina’ and Shamal-Sina’ SCAD/M counts comes to 640.0 (1990-2011) and amounts to over half (52%) of the combined SCAD/M for the top five most conflicted provinces. There are doubtless other contributing factors to
Sinai’s overwhelming conflict numbers, but the most glaring of these has to be proximity Gaza, Israel, and all related issues which constantly reverberate throughout the area.

Though province-level literacy levels and income levels are not available to the writer, low literacy and low income could be additional contributors to intolerance and strife\textsuperscript{10}. Given the area’s past history, it would seem plausible that these would take second place after the ever-changing Gaza-Israel problems. Population density also ranks highest for the Sinai region with Shamal-Sina’ ranking first (population density is 14.3303 inhabitants/km\textsuperscript{2}), outstripping even the fifth of the leading SCAD/M contenders by fourteen fold - Al Wadi al Jadid (population density is 0.4726 inhabitants/km\textsuperscript{2}).

Though this would appear to indicate population density as a contender for high provincial-level conflict, this is mitigated by Egypt’s significant negative correlation between provincial population and population density and SCAD/M which is at odds with the number just mentioned. The correlation shows that Egypt’s SCAD/M count decreases with increasing provincial population levels ($r=-0.619$); the correlation for provincial population density is half that ($r=-0.350$). At $r=-0.619$ the population correlation is strong and definitive compared to the moderate correlation with population density and should therefore be taken as the stronger contender for provincial low-level strife.

Egypt’s single Berber population is small, isolated and historically alienated from the rest of the country. The Siwi number about 30,000 and are located in a single oasis on Egypt’s

\textsuperscript{10} About 60\% of countries that rank low on the HDI suffer serious conflict, whereas only 24\% of the medium ranking countries do so. They show a strong correlation between their status in human development and the propensity to conflict. For more information regarding the correlation between literacy and conflict, please see: Literacy in conflict situations. Ulrike Hanemann, “Literacy for Life” Background paper prepared for the Education for all Global Monitoring Report, UNESCO Institute for Education, Hamburg, Germany, March 2005.
western border with Libya and have stronger historical, linguistic and cultural ties with Maghreb rather than the Mashriq. Though the Siwa Berber are located in Matruh province, no incidents within the province have occurred inside a radius of 280 km of the Siwa location. Incidents that did occur in the province were too far from the Siwa Berber to have an relevance: they occurred in Marsa-Matruh, a resort city on the Mediterranean, some 280 km from Siwa, and the other at the Libyan-Egyptian border, near Qesm-as-Saloum (Egypt), about 268 km from Siwa. The four Berber variables - percent Berber, Berber population, Berber population density, and number of Berber language groups – are all $r=0.126$ for Egypt, all showing negligible increases with increases in SCAD/M. But, because there is only a single Berber population, all correlations for Berber in Egypt are identical, and of doubtful relevance.

**Libya**

Comparing the correlations overall, Libya is similar in the SCAD/M correlations looked at here when compared to Algeria, but is very different from Tunisia and Morocco and Egypt. About 235 kilometers due west of Siwa lies the next Berber region at Awjilah in Ajdabiya province, Libya. Ajdabiya accounts for 12.055 SCAD/M, ranking 26th out of Libya’s 32 provinces\(^{11}\). Unlike Egypt, Libya shows no strong correlation between provincial area and SCAD/M ($r=0.250$), which might be explained by the more than 14 fold difference in national populations between the two countries (82.4 million inhabitants for Egypt versus Libya’s 5.7 million\(^{12}\)) as well as by the comparative SCAD/M counts (Libya 1,005 versus Egypt’s 1,840 over the same time period).

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11. Libya has seen much reorganization of its provinces (districts), particularly since the end of Ottoman Rule. For this study 32 provinces are used. Please see Statoids for more information in Libya’s provinces: [Statoids](http://www.statoids.com/uly.html) (accessed January 15, 2013).

12. Please note earlier comment on population sources for this paper- citipopulation.com.
Libyan Berber population correlations negative and negligible ranging from r=-0.181 to r=-0.184: as the country’s Berber populations, percent of Berber population and Berber population density increases, so the SCAD/M decreases. The single exception is moderate, positive correlation between the number of Berber groups and SCAD/M (r=0.333) indicating a SCAD/M increase as the number of these groups increases. Since the correlation is only moderate, other contributing factors than those looked at here might prove better correlates for SCAD/M.

Another possibility is that because all Libya’s Berber populations are remote from major population centers, when SCAD events occur there it is simply because these are so few even marginally habitable areas in the country. In other words, outside of Libya’s main population centers of Tripoli, Sirte and the ancient Cyrenaican areas of Marj (Barce), Benghazi (Euhesperides/ Berenice), Taucheira (Arsinoe/Taucheira), Bayda (Belagrae/Bayda/Beda Littoria), and Susa (Apollonia/port of Cyrene), the county is inhospitable to human habitation. It is much the same as seen in Egypt and a phenomenon that exists throughout North Africa – large expanses of desert dotted with few areas with even minimal water and soil quality to sustain habilitation. Where limited water supply exists, either in the form of oasis-ground water or rainfall, habitation size and density is entirely restricted to a small radius, and the number of such water ‘pockets’ over the country is very limited. Despite large surface area, Libya has the least amount of actually habitable areas. The already negligible SCAD/M in

Libyan Berber areas may be indirectly attributable to this phenomenon. The small population areas outside the main population centers just mentioned to have sufficient population where low-level conflict would be a more likely event, particularly if coupled with reduced administrative capabilities and lower policing typical of the Berber areas. The main hot
spot for this type of occurrence is in Libya’s Murzuq province, deep in the southwest where the Tahaggar-Tamahaq (Tuareg) Berber are in constant flux over the Algerian, Niger and Chad borders. This Berber phenomenon was also seen in Egypt where the Tuareg constantly move back and forth across the Saharan region.

This constant movement may be a source of the low level conflict, but in Libya the moderate correlation between SCAD/M and Berber language groups (r=0.333) is driven by the natural distribution of Berber groups distributed across artificial, man-made provincial and national borders. When Berber groups overlap provincial boundaries, a single Berber ethnic area (or other ethnic area) may occur at the intersection of many man-made boundaries. Each province will then show positive for Berber presence, even though it may be the same Berber group. The range Nafusi Berber, who inhabit the Jebel Nafusa Mountains in northwestern Libya, crosses three provincial boundaries: Yafran-Jadu, Gharyan, and Nalut; the Tahaggar-Tamahaq span two - Murzuq and Ghat; and the Awjilah span Ajdabiya and Al-Wahat provinces in the northeast.

**Tunisia**

Tunisia’s most prominent SCAD/M correlation is for provincial area (r=0.564), showing a strong increase of SCAD/M as provincial area increases and is comparable to Egypt’s same correlation (r=0.538). An area frequency diagram shows that most of the country’s 24 provincial areas are between 2,500 km² and 10,000 km². Since we are looking for those at the upper end of the scale, those provinces larger than 5,000 km² would be of greater interest, of which there are nine (9). Of these nine (9), seven (7) provinces range between 6,700 and 9,000 km² and the remaining two are above 22,000 km². All nine range in location from the country’s midpoint to points south of there, and rank as Tunisia’s least densely populated provinces, with Tatouine
being the largest in area (38,889 km²) and least for population density (3.8 inh./km², 24th out of 24), and Kairouan the 9th largest (6,712 km²) and 13/24 for population density.

<table>
<thead>
<tr>
<th>SCAD/M</th>
<th>Province</th>
<th>Prov pop</th>
<th>Prov area</th>
<th>Prov pop density</th>
<th>Prov Berber pop</th>
<th>% Berber prov pop</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.8</td>
<td>Tatouine</td>
<td>148,000²</td>
<td>38,889¹</td>
<td>3.8²</td>
<td>2288¹</td>
<td>0.015²</td>
</tr>
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<td>78.8</td>
<td>Kebili</td>
<td>152,200²</td>
<td>22,084²</td>
<td>6.9²</td>
<td>5726³</td>
<td>0.037¹</td>
</tr>
<tr>
<td>35.1</td>
<td>Gafsa</td>
<td>341,600¹</td>
<td>8,990³</td>
<td>38.0²</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>19.6</td>
<td>Médénine</td>
<td>460,000¹</td>
<td>8,588⁴</td>
<td>53.6³</td>
<td>6500²</td>
<td>0.014³</td>
</tr>
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<td>25.2</td>
<td>Kasserine</td>
<td>437,200²</td>
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<td>7.4</td>
<td>Sfax</td>
<td>944,500⁷</td>
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</tr>
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<td>19.1</td>
<td>Gabès</td>
<td>366,100¹</td>
<td>7,175⁷</td>
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<td>13774¹</td>
<td>0.037¹</td>
</tr>
<tr>
<td>19.2</td>
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<td>415,900¹</td>
<td>6,994⁸</td>
<td>59.5³</td>
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<td>0</td>
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<tr>
<td>14.2</td>
<td>Kairouan</td>
<td>564,900⁶</td>
<td>6,712⁹</td>
<td>84.2²</td>
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<tr>
<td>27.4</td>
<td>Country Mean</td>
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<td>6,439</td>
<td>302.074</td>
<td>1178.7</td>
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<tr>
<td>19.2</td>
<td>Country median</td>
<td>420,950.0</td>
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<td>85.2657</td>
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<td>19.9</td>
<td>Country Std Dev</td>
<td>231,635.1</td>
<td>8,250</td>
<td>607.781</td>
<td>3207.7</td>
<td>0.0110</td>
</tr>
</tbody>
</table>

Source: Author’s calculations with data from SCAD and from City Population.de. (accessed 1/10/2013)

In Table 6.3, Tunisia’s area is ranked in descending order of size, and a reverse ranking is noted between area and provincial population, such that as area increases as population size decreases¹³. Also in Table 6.3 provincial % Berber is seen to be related to the area, with Tatouine and Kebili showing highest, Gabès tying for % Berber’ variable, but seventh for area,

¹³ Please bear in mind that for the provinces listed in Table 6.3, only the 9 highest for area are listed, though numbers are based on Tunisia’s 24 provinces.
and Médénine showing fourth for area and third for % Berber. Some relationship might exist between provincial area and SCAD/M and population density for Médénine, Kasserine, and Gabès, though nothing appears to correlate for any of the Berber variables used here.

There is a positive but negligible correlation between Tunisian SCAD/M and the Berber population ($r=0.14018$) which approximates the same correlation in Egypt where it disregarded and shall be here also. What little relationship there is between Berber population and low level conflict events appears to be driven principally by the Shilha Berber of Kebili province (78.8 SCAD/M), to a lesser extent by the Ghadamès Berber in the remote south of Tatouine province (60.8 SCAD/M) and to a much smaller extent is attributable to the Shilha of Médénine (19.6 SCAD/M) and Gabès (19.12 SCAD/M).

Source: Author’s calculations and chat using data from. City Populations.de. (accessed January 10, 2013)

The median SCAD/M for these nine provinces for the time period is 19.56 (mean is 31.0), but with the highest % Berber reaching only 0.037 (Kebili and Gabès share the same calculated Berber %) it would seem unreasonable to attribute all of these to the Berber. However, having said that, the Tunisian province which rates highest for SCAD/M is also Kebili, and this is also the province which rates highest for non-normalized SCAD/million (32.9), for Berber nationwide.
SCAD counts (12) and for Berber non-nationwide SCAD events (5). Coincidentally the Berber non-nationwide SCAD events coincide in number with the nationwide SCAD counts (also 5), which might mean that there is more Berber involvement in Kebili than first thought.

**Algeria**

As provincial area in Algeria increases heading south and away from the coast, the SCAD/M events lessen, with reciprocity driven mostly by water availability and soil quality. With the exception of Alger province, 22 Algerian provincial areas measure between 1,000 and 5,000 km², 8 cover between 5-10,000 km², 5 between 10-25,000 km², 3 between 25-50,000 km² and the remaining 9 cover between 70-600,000 km².

From north to south the country’s populations become more scant beginning from the northern littoral and heading south into the desert steppes and Saharan desert itself. Consistent with the countries see thus far, the two most reactive SCAD/M provinces are in the least populated areas of the desert steppes and the country’s Saharan region.

SCAD/M correlations are mostly negligible, particularly for the two Berber variables of Berber % population (r = -0.166) and Berber population density (r = -0.176), and the provincial population correlation is r = -0.104. There is a weakly negative correlation of r = -0.219 for Berber population, close to values for Libya (r = -0.184) and Morocco (r = -0.201), indicating that SCAD/M decreases with increasing provincial Berber populations. The Berber language groups’ correlation is moderate (r = 0.315) and the correlation for provincial area is strongly positive (r = 0.404) indicating increasing SCAD/Million with both these variables: greater numbers of Berber language groups within a province and the greater the size of the province corresponds to an increase in the low-level conflict. Strongly correlated, but negatively so, is the provincial population variable (r = -0.440) indicating a decrease in SCAD/Million with increasing provincial
populations such that low-level conflict decreases as the provincial populations increase in size. Since, as already mentioned, a greater number of the densely populated areas are in the country’s north, most of the SCAD/M activity occurs south of the littoral, a phenomenon seen across the region and explained earlier.

The provincial area correlation for Algeria (r=0.404), most closely resembles neighboring Tunisia’s value for that variable (r=0.564), and that of Egypt (r=0.538) and may well be attributed to the same causes. The proximity of Algeria’s larger provinces to the exterior, particularly areas bordering the Saharan belt across Algeria’s south where the Tahaggar and other Tuareg tribes range freely, may be causing increased social tumult within those southern provinces. This same phenomenon was also seen in Libya (r=0.250) where Murzuq province is seen to be open to the same external influences from marauding desert tribes.

Most of Algeria’s approximately 30 million inhabitants are located on the Mediterranean littoral with the highest concentrations in Alger, Blida, Annaba and Oran provinces followed by Mostaganem, Chlef, Ain Defla, Médéa, Boumerdes, Tizi Ouzou, Béjaïa, Bordj Bou Arréridj, Sétif, Jijel, Mila, Constantine, Skikda, and El-Tarf provinces. All these provinces are either on the coast or, as in the case of Constantine, within 80 kilometers of the coast. For actual SCAD counts (not nationwide count and not SCAD/M of population) this is where most of these low-level conflict events have occurred. For the twenty one years of this study, Tipaza has had the highest number of events (94), followed by 40 in Béjaïa and 26 in Tizi Ouzou.

Because Tipaza province is the ‘bedroom’ community for the capital city of Algiers, the SCAD numbers for Alger province (containing a portion of the extremely densely populated city of Algiers), amounts to only two (2) events. This results from a division of Algiers such that it spans two provinces – Alger province includes the eastern portion of Algiers while the western
Algiers agglomeration spreads west into Tipaza. The Tipaza section of Algiers includes the U.S. Embassy, the embassies of France, Britain, Canada, Japan along with most western embassies and most of the universities, the stadium and the Algerian ministries and international corporation headquarters. Eastern Algiers is mostly composed of hotels, ports and housing. It therefore makes sense that Tipaza province itself have a higher count, not because of the province's high population of population density per se, but because that half of Algiers which caters to national and international seats of government, policy and commerce are located in the Tipaza portion of Algiers, which is far more likely to contain the type of conflict looked at here than in the factory/residential section of Algiers located in Alger province.

Tipaza itself has a population of merely 506,053 (density 228.1 inh. /km²) compared to Alger's 2.56 million (density 8,386.2 inh. /km²) and the correlation for provincial population density to SCAD/Million is slightly negative (r= -0.104) and essentially the same a Morocco's (r= -0.102) so much the same conclusion can be drawn: as population density increases, so the SCAD/Million count decreases. This is possibly because the actual number of event centers, or locations of the conflict events, may be extremely localized to areas which are strung together along the coast from the capital at Algiers: Tipaza, Alger, Boumerdes, Tizi Ouzou, and Béjaia. Together these five provinces are responsible for 165 of Algeria's total 261 SCAD events, (about 63%), their populations total 2,010,283 compared to Algeria's total 23 million, area for the combined five provinces is 10,372 versus Algeria's 2,410,827 km² surface area, and the combined five have a population density is 194 inhabitants/km² compared to Algeria's total calculated population density of 9.5 inhabitants/km².

As already mentioned, the provincial area to SCAD/M has a value of r=.404 and that of population to SCAD/Million = r= -0.440, but this is explained by the population density value (r= -0.104), showing one again that provincial the provinces smaller in area in the north of the
country which contain the larger populations have fewer SCAD/M, despite their greater density. As seen just above, however, they do have a greater numbers of non-nationwide, i.e. localized, events. This means that of the events listed here, Algeria’s northern littoral region is responsible for a greater number of SCAD events to occur at the local level, not to be confused with nationwide counts which are spread out throughout the country.

Of her 48 provinces, most (35) have populations ranging between 500,000 and 900,000 and of the latter range, 16 provinces contain populations between 500,000 and 700,000. Only four provinces contain between 1 and 3 million inhabitants, and the most populous of Algeria’s provinces is Alger (ISO code DZ16, population 2.56 million), followed by Sétif (DZ19, 1.3 million), Oran (DZ31, 1.2 million), and the Berber stronghold of Tizi Ouzou (DZ15, 1.1 million). It might be because these are the most cosmopolitan and most well-policed of the provinces (including the capital at Algiers) where police presence is high thereby regulating conflict levels, which drives the SCAD/M numbers down. It might also be that because the time in question (1990-2011) covers Algeria’s civil war when low-level conflict such as SCAD became irrelevant in the face of much greater violence and armed conflict. That is, when during the civil war the army, police and various Islamist factions were out in force, it may not have been possible (or desirable) to be out of doors, much less actually engaging civil protest. During the civil war period such events would perhaps have been considered foolhardy.

However, such events would have been possible and more probable in the vast open expanses of Tindouf and Illizi, both of which span the Saharan belt and have more loosely-defined administrative and policing capabilities and government control. These two provinces rank the highest for SCAD/M and are in a class apart in that category, outflanking the next highest, Naâma, by a factor of 3.6 (see chart below). Population density (inhabitants/km²) is
extremely low for both provinces (0.2, 0.1 respectively), and would not therefore be a likely
ccontributor to the high SCAD/M counts. In the case of Tindouf province, however, there may be
some other contributing factors, such as its location in the absolute southwest of the country,
right next to Mauritania and Mali and the constant influx of political tensions from Timbuktu
and Gao and other generally volatile areas in the southwest. Tindouf’s northwest borders
Morocco’s two disputed territories, Oued-ed-Dahab-Lagouira and Laayoune-Boujdour-Sakia-el-
Hamra, which could also contribute to some extent to social instability within the province.
There is also a Berber population, mostly derived from the Central Atlas Tamazight and Tachelhit
populations in Morocco’s southern Atlas, though for both Algeria and Morocco, Berber
populations have a negative effect overall on SCAD/M events, making Berber as a cause of this
conflict much less likely.

Though similar to Tindouf in with respect to extra-national border conflict zones, Illizi
has some added potential conflict factors for SCAD/M from within. Illizi’s enormous area, some
284,600 km², borders Libya’s Murzuq province (see Libya above), already seen as a Tahaggar-
Tamahaq Berber area, which may well explain part of the province’s social unrest. More likely,
thought, conflict is generated by the constant influx of refugees from the poor borders with
Niger and Chad, which travel up through both Libya and Algeria borders heading north to cross
to Europe. These populations pose a great threat to the extremely sensitive deserts and oases
throughout the Sahara. Travelling north through Illizi’s Tassili N’Ajjer National Park, there is
easy access to Algeria’s northern points as well as to Tunisian and Libyan port cities where the
refugees board for Italy and France. Travelling through these southern provinces, wreaks havoc
on indigenous North African populations, and perhaps further contributing to SCAD numbers.
Table 6.4: Algeria: highest ranked SCAD count provinces showing population characteristics.

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>ISO Code</th>
<th>Population</th>
<th>Area</th>
<th>Density</th>
<th>Prov Berber</th>
<th>Berber Language Groups</th>
<th>Berber Density</th>
<th>% Berber</th>
<th>SCAD/M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>Tindouf</td>
<td>DZ37</td>
<td>27,060</td>
<td>159,000</td>
<td>0.2</td>
<td>11,929.7</td>
<td>2.0</td>
<td>0.1</td>
<td>-</td>
<td>1,810.8</td>
</tr>
<tr>
<td>Algeria</td>
<td>Illizi</td>
<td>DZ33</td>
<td>34,108</td>
<td>284,618</td>
<td>0.1</td>
<td>3,971.5</td>
<td>2.0</td>
<td>0.0</td>
<td>-</td>
<td>1,436.6</td>
</tr>
<tr>
<td>Algeria</td>
<td>Naama</td>
<td>DZ45</td>
<td>127,314</td>
<td>30,644</td>
<td>4.2</td>
<td>2,385.2</td>
<td>1.0</td>
<td>0.1</td>
<td>-</td>
<td>392.7</td>
</tr>
<tr>
<td>Algeria</td>
<td>Tamanghà</td>
<td>DZ11</td>
<td>137,175</td>
<td>556,000</td>
<td>0.2</td>
<td>14,157.2</td>
<td>2.0</td>
<td>0.0</td>
<td>-</td>
<td>371.8</td>
</tr>
<tr>
<td>Algeria</td>
<td>El Bayadh</td>
<td>DZ32</td>
<td>168,789</td>
<td>70,539</td>
<td>2.4</td>
<td>3,162.3</td>
<td>1.0</td>
<td>0.0</td>
<td>-</td>
<td>290.3</td>
</tr>
<tr>
<td>Algeria</td>
<td>Tipaza</td>
<td>DZ42</td>
<td>506,053</td>
<td>2,219</td>
<td>228.1</td>
<td>19,066.7</td>
<td>1.0</td>
<td>8.6</td>
<td>-</td>
<td>282.6</td>
</tr>
<tr>
<td>Algeria</td>
<td>Béchar</td>
<td>DZ08</td>
<td>225,546</td>
<td>161,400</td>
<td>1.4</td>
<td>27,933.4</td>
<td>2.0</td>
<td>0.2</td>
<td>-</td>
<td>230.6</td>
</tr>
<tr>
<td>Algeria</td>
<td>Tissemsilt</td>
<td>DZ38</td>
<td>264,240</td>
<td>3,151</td>
<td>83.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>185.4</td>
</tr>
<tr>
<td>Algeria</td>
<td>Saida</td>
<td>DZ20</td>
<td>279,526</td>
<td>6,631</td>
<td>42.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>175.3</td>
</tr>
<tr>
<td>Algeria</td>
<td>Ghardaia</td>
<td>DZ47</td>
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<td>86,105</td>
<td>3.5</td>
<td>60,414.5</td>
<td>1.0</td>
<td>0.7</td>
<td>-</td>
<td>169.7</td>
</tr>
<tr>
<td>Algeria</td>
<td>Adrar</td>
<td>DZ01</td>
<td>311,615</td>
<td>439,700</td>
<td>0.7</td>
<td>43,760.4</td>
<td>3.0</td>
<td>0.1</td>
<td>-</td>
<td>157.2</td>
</tr>
</tbody>
</table>

Source: Author’s table generated using SCAD data from SCAD database, provincial population and area data from City Population.de and Berber ethnic data from Ethnologue (accessed January 10, 2013).

Fig. 6.5.: Algeria: top 22 provinces for SCAD/M counts, 1990-2011

Source: Author’s calculations based on SCAD data.
Note: ISO numbers at the bottom are identified on the previous table (Table. 6.4)

Morocco

Morocco is distinct for all seven (7) areas reviewed here in that correlations with SCAD/M events are negative: provincial population and density, provincial area, Berber population and density, percent Berber and the number of Berber language groups. This was true for correlations both including and excluding Morocco’s two (2) contested areas Oued el
Dahab Lagouira and Laayoune Boujdour (see Table below for Moroccan correlations including and excluding the disputed territories).

The country's provincial population vs. SCAD/M correlation ($r = -0.520$) ranks as third most negative after Egypt ($r = -0.619$) and Tunisia ($r = -0.580$), followed by Algeria and Libya and though negative is strong. Discounting Egypt because of its dissimilarity with respect to Berber populations puts Morocco in second place after Tunisia and, as already seen for Tunisia, indicates a decrease in SCAD/M as provincial populations increase in size. Though more normally distributed for area than the other Maghreb countries, Morocco’s population distribution is as unevenly distributed as her neighbors. Morocco’s population is distributed such that 6 of her sixteen provinces (regions) containing between 1.47 and 2.0 million, another 4 provinces with between 2.0 and 2.6 million, and 3 provinces with between 3.19 and 3.72 million inhabitants. True to form for most large agglomerations, the province with the greatest number of inhabitants (3.72 million) is also the smallest province- Grand Casablanca (1026 km2).

Source: Author’s chart using data from City Population.de. ISOs identify each province and are listed in the Appendix.

Such jurisdictional decisions appear to be deliberate moves by the Moroccan government in continued efforts to maintain density equilibria throughout the country. These various
redistricting merges and splits, the most recent for Grand Casablanca, recurred repeatedly during the 1970s early to 1990s, either when regions were ceded to Morocco by Spain, or when population concentrations became administratively unwieldy.\footnote{Statoids: Regions of Morocco \url{http://www.statoids.com/uma.html} (accessed May 25, 2013).}

Table 6.5 show the uneven population and density distributions. Most of the SCAD/M activity occurs in Morocco’s two contested territories of Laayoune-Boujdour-Sakia el Hamra, accounting for 2666.7 counts, and Oued ed Dahab-Lagouira, with a far smaller count of 231.5. Together they account for 93% of Morocco’s 3099.7 events between 1990-2011, without which Morocco’s SCAD/Million count is a mere 201.6.

The next significant SCAD/M correlation for Morocco concerns the number of Berber groups (language groups). The correlation is negative, with SCAD/M decreasing as the number of Berber groups in a province increases ($r= -0.365$). We have already seen how the highest SCAD/M occurs in Morocco’s disputed territories, both of which are in the deep south of the country, just above Mauritania and Mali. As Moroccan provinces progress from south to north and from west to east, so the number of Berber tribes increases, reaching a maximum of 3 Berber groups per province in L’Oriental and Taza-Al Hoceima-Taounate both in the far north of the country. Tanger-Tétouan is also in the far north, across from the Strait of Gibraltar, and together with Tadla-Azilal (near Marrakesh), and Marrakech-Tensift-Al Haouz (located in the country’s center, with Marrakesh at its heart) these provinces each have 2 Berber groups per province. Further south and just north of the disputed territories is Sous-Massa-Draa which also contains 2 Berber groups, but these are located more to the east, along the Atlas range. Morocco’s decrease of SCAD events with increase in Berber groups is supported by the SCAD/M events predominating in non-Berber or low-Berber areas such as Rabat-Sale (48 events over the
period 1990-2011) and Grand Casablanca (30 per same time period), and she has by far the most widespread Berber population of these countries, extending from southwest to northeast along the Atlas range and along the northern Rif Mountains into Algeria.

Moroccan Correlation values for provincial Berber population vs. SCAD/M are negative ($r = -0.201$), but comparable with Algeria ($r = -0.219$), and Libya ($r = -0.184$). This implies less reactive Berber populations in those areas designated as Berber areas\textsuperscript{15}, with SCAD events decreasing with increasing in Berber population. Tunisia and Egypt, on the other hand, have Berber population correlations with opposite tendencies ($r = 0.140$ and $r = 0.126$ respectively), but these too are negligible in strength.

Of the five countries, Morocco’s provincial Berber density correlation ($r = -0.277$) is weak but is the most pronounced, followed by Libya ($r = -0.181$) with SCAD/M decreasing as Berber population density increases and making Morocco the least low-level conflict prone of countries in provinces with a Berber presence.

Neighboring Algeria’s same correlation value is ($r = -0.176$) shows the difference between the two countries in overall provincial Berber population versus Berber population density. Algeria’s 7,017,076 Berber population numbers about versus approximate 7,285,404 for Morocco, but the distribution across their provinces is very different. Algeria has 6 times the Berber density than Morocco is the most extreme case (Adrar (Alg.), 261 vs Marrakesh (Mor.), 44). But throughout the distribution, Berber density in Algeria (see graph) far exceeds that of Morocco. The Moroccan Berber are distributed over 12 of 16 sixteen provinces whereas Algeria’s Berber are spread out over 34 of 48. Morocco has the least incidence of SCAD/M

\textsuperscript{15} As mentioned earlier, all Berber areas are derived from the Ethnologue map. For Morocco these groups are the Tarifit, the Taznatit, the Central Atlas Tamazight, the Tachelhit, the Senhaja and the Ghomara.
events in provinces where Berber are present \((r = -0.277)\). These more peaceable Berber areas would include the Atlas, Ante-Atlas and the Rif in the north of the country.

Provincial population density to SCAD/M incidence correlation for Morocco \((r = -0.102)\) is about equal to that off Algeria’s \((-0.104)\) both showing that as provincial population increases, so SCAD decreases, though both values pale next to Egypt’s more pronounced, moderate value \((r = -0.349)\). Though Algeria and Morocco show only a negligible, negative correlation of SCAD/M to population density, Egypt shows three times that negative effect, and appears to be the result of populations being concentrated in fewer, small areas leaving most of the provincial land masses with little or no population.

Morocco’s singular most populous area is the agglomeration of Grand Casablanca (Grand Casablanca province) with a population of 3,084,569\(^{16}\), followed by the agglomeration around the capital city of Rabat with a population of 1,622,860 (Rabat-Salé province). Though amounting to half the population size of Grand Casablanca, Rabat-Salé nevertheless accounts for

\(^{16}\) City Population.de [http://www.citypopulation.de/Morocco.html#Stadt_gross](http://www.citypopulation.de/Morocco.html#Stadt_gross) (accessed January 6, 2013).
48 local, non-nationwide\textsuperscript{17} SCAD events in the time period, in contrast to Grand Casablanca’s 30. Considering Morocco’s total for the time period of 137, 35% of the nation’s total to SCAD/M events are attributable to Rabat in contrast to Casablanca’s 22%. Rabat's status as the country’s capital explains much of this difference since this is where demonstrations, protests and other events against embassies and international corporations would take place. The remaining 59 of Morocco's 137 events are dispersed more or less uniformly across the remainder of the country.

The correlation between area (km\textsuperscript{2}) and SCAD in Morocco is \( r = -0.236 \) and underlines what was just mentioned regarding the country’s population density. Of the five countries, Morocco is unique in this correlation: whereas in the other four countries SCAD/M increased with increasing area, in Morocco the opposite occurs – SCAD/M events decrease with increasing area. This means the events occur mostly in small densely populated areas around the great cities and agglomerations and tend not to occur in the vast open spaces, and it is generally in the larger provinces of Morocco that the Berber live making this area correlation finding consistent with the Moroccan Berber correlations – the greater the Berber presence, the lesser the SCAD/M count.

Because the population is concentrated in few population centers, with the country’s remaining population sparsely inhabiting the remainder, the remainder of the country has far fewer SCAD events overall. The country’s total (137)\textsuperscript{18} minus 48 and 30 for the agglomerations (Rabat and Grand Casablanca) leaves only 59 to be distributed over the remainder of the country. Over the 14 remaining provinces, 59 events remain to be distributed (59remaining /14 provinces) which likely accounts for Morocco being the lowest for area correlations to SCAD/M.

\textsuperscript{17} Not to be confused with SCAD/M events, these events are local to the province and include neither nationwide nor normalized events.

\textsuperscript{18} Again these are the non-normalized, non-nationwide counts, referring only to local SCAD counts.
Morocco’s events are concentrated in two single provinces, Rabat-Salé (10,226 km²) and Grand Casablanca (1,026 km²), both of which also rank as the smallest provinces of the 16 provinces of Morocco’s total 478,453 km² total area and are the most densely populated. That events are concentrated in these two cosmopolitan cities is not surprising.

**Conclusion regarding the Berber and low level conflict in North Africa**

The purpose of this analysis is to determine whether or not Berber populations are associated with an increase in SCAD events during the period 1990 to 2011. We saw earlier that Egypt’s single indigenous Berber population is entirely isolated from the remainder of the country, with no visible effect on low-level conflict events and an explanation was given that the single Egyptian Berber population – the Siwa Berber – are really best seen in the context of Libya’s Berber and the west of North Africa (El Maghreb) than as part of Egypt’s population and the Arab Mashriq.

Because of Egypt’s special ‘Berber’ case, playing essentially no part in that country’s low-level conflict events, Egypt is first included in the correlations (all countries-ac), but is also shown separately from the other five countries (all countries NO Egypt= acNe). This better shows the effect of the already sparsely dispersed Berber across the immense expanses of North Africa proceeding from east to west. The variable percent (%) Berber per province is seen as negligible to none, except in Morocco where it is weak. The correlation for the variable Berber provincial population is similarly negative and negligible for all countries except Algeria and Morocco where it is weakly negative.

Tunisia is alone in having a positive correlation for Berber population but that too is negligible. For the variable ‘number of Berber language groups’ the correlation is moderately positive is Libya and Algeria, and moderately negative in Morocco (as with all of Morocco’s
correlations), but more pronounced than the former two. Tunisia, Algeria and Libya all have good correlations for Berber groups (respectively r=0.394, p-value 0.028, r=0.315, p-value 0.015, r=0.333, p-value 0.031).

Source: Author’s calculations using data from SCAD and City Population.de.

All the Maghreb countries have negative correlations for Berber population density, and most range from negligible to weak at best, with Morocco being the strongest, but still negative, correlation. Over the 21 year time period the Berber of the Maghreb countries appear all to have similar, negative and mostly negligible responses to SCAD. The highest correlations concern the ‘number of Berber groups’ and extends across the Maghreb (excludes Egypt) and though strongest in Tunisia, is still only moderate in strength. Morocco’s is also moderate but negatively so.

**Berber population density across the Maghreb (excluding Egypt)**

Excepting Egypt, the densities of Berber per province appear in this study to have the uniform effect of reducing SCAD/M. In Algeria, Libya, Morocco, and Tunisia, Berber population density has a slight effect of lessening low-level conflict when compared to each country’s non-Berber population, particularly so in Morocco (r= -0.277). Algeria and Libya are about at par for this correlation, making this type of conflict less likely in Berber areas, but with a
Whereas in Algeria the correlation between Berber density and non-Berber higher density areas is almost awash, in Libya the Berber presence to conflict is opposite to what is found in non-Berber areas: outside Libyan Berber areas actually increases, albeit slightly, the chance of SCAD/M events. Tunisia shows no difference in this conflict level between Berber and non-Berber populations. Nor does there appear to be a difference between Berber and non-Berber population density with respect to SCAD/M, though living in a Berber area in Morocco and Algeria would be slightly less conflicted, in Tunisia there would be no difference, and in Libya the Berber-dense areas would, by Libyan standards, be about at par with Algerian Berber areas and less conflicted than in Libyan non-Berber areas. The distribution of correlations for Maghreb (Algeria, Libya, Morocco, Tunisia) is left-skewed (with correlation values taken as absolutes, not as actual values)\(^\text{19}\), yet taking both Berber and non-Berber population densities, the distribution appears somewhat mi-modal, though to test that it would be necessary to determine if the Berber and non-Berber population density means differ by at least twice their common standard deviations, but since we have so few data (only 5 country

\[\text{Fig. 6.9. Correl Berber pop. den and : SCAD/M; SCAD, 1990-2011}\]

\[^{19}\text{Value for the median (Morocco) is } r = -0.277, \text{ and for the mean is } r = -0.05, \text{ making this a left-tailed distribution.}\]
correlations each for Berber and non-Berber populations) that this shall remain unsubstantiated here.

**Berber population to SCAD/M correlations across Egypt and the Maghreb**

Across the Maghreb Berber-SCAD/M correlations are uniformly negligible, ranging from negligible to weak at best (Libya= -0.184, Morocco= -0.201, Algeria= -0.219, Tunisia= 0.14) and with Tunisia being the single positive correlation. In non-Berber populations across these four countries, the low-level conflict correlation tends to be about double that of the Berber populations and, with the exception of Tunisia, are all negative: Both Berber and non-Berber populations in Algeria, Morocco and Libya tended not to engage in low-level conflict for the time period 1990-2011. Tunisia’s purported 1%\(^{20}\) Berber population is only negligibly (positively) reactive to this conflict type, yet that country’s non-Berber population shows strongly negative reaction to this same type of event (protests, demonstrations and other low-level conflict) for the time period 1990-2011.

Correlations for Berber provincial populations in Algeria, Libya, and Morocco are negligible to weak and negative and cluster closely together (Libya r= -0.184, Morocco r= -0.201 and Algeria r= -0.219) with Algeria being the strongest correlation indicating that as Berber populations increase, the SCAD/M count decreases. For these three countries, provinces where Berber are present are less subject to disruptions typical of SCAD. This would mean fewer protests, demonstrations and other events associated with social conflict occur in areas populated by Berber peoples (in these three countries), but because the correlation is negligible to weak the effects would not be readily apparent. For Egypt and Tunisia, the correlation is

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20. Tunisia has long held that the country is only 1% Berber.
even more slight, but in a positive direction such that Berber population increases there is an imperceptible increase in SCAD/M events. \((r=-0.126, -0.140\) respectively).

Taken together with the Berber population density data correlations for the five nations, which is also negatively correlated for Berber populations to SCAD/M, the Berber provincial population correlations would further underline the Berber propensity for a less outwardly socially demonstrative tendencies, though only in the context of SCAD events per se. The only exception for Berber density to SCAD/M is Egypt which can be explained using the same reasoning as seen above in the Berber population data from Matruh province (Egypt) where activity is largely attributable to non-indigenous Berber agents having crossed into Berber areas.

Other than Egypt, the correlations range from \(r= -.034\) (Tunisia) to \(r= -0.277\) (Morocco) and imply that as the Berber population density increases, so the SCAD/Million incidents decrease, once again underlining the relative lack of low level social conflict in Berber areas.

**Berber groups**

Data for the number of Berber groups correlates to SCAD/M appears to confound all prior Berber conclusions, but the p-values for Algeria, Tunisia and Libya all show that this is not simply chance (discussed earlier and is one of the confirmed hypotheses). Though we cannot attribute a cause, it is interesting to note that historically these regions are all close to where the Berber originated - Gafsa. It may simply be that there is such a lack of variability within the data that it erroneously drives the correlations up, causing this discrepancy. The number of provinces for the entire region is 147, of which 61 contain Berber and 86 have not Berber populations whatsoever. In any one province the number of Berber groups never exceeds four \((4)\), and in many \((86)\) provinces the Berber count is zero, but in the 61 provinces containing Berber it was necessary to have a uniform method of determining the number of Berber
groups within provincial boundaries, but because populations do not adhere to the more ‘artificial’ boundaries and borders, it was necessary to account for overlapping populations by either inclusion or exclusion. The Ethnology Berber maps showing the extent of the Berber populations, along with the Berber population populations themselves, show no date of collection nor is there any authentication showing when the data was collected. What is known is that each country’s population was known to be increasing, and it was decided to include even small overlapping areas on the map when the Berber groups was seen to spill over into a neighboring province or country. For example, in L’Oriental province (Morocco), three Berber groups are counted, the Tarifit, the Central Atlas Tamazight, both situated well within provincial boundaries, and thirdly the Taznatit. Though the Taznatit occur in two locations bordering Algerian provinces of Naâma and Béchar, they are considered as one group since their cross national border coverage is contiguous; they were there in place prior to the drawing of any national border lines. Despite the slender extent of the Taznatit spillover into l’Oriental, the Taznatit count was nevertheless included so as to comply with the convention for Berber population inclusion. Another inconsistency for Berber group to SCAD/M count for ‘Berber’ provinces (provinces containing Berber populations) may also occur when that province contains other factors incidental to being Berber provinces which might be the greater contributors to the SCAD/M events than the Berber themselves. For example, contiguous with l’Oriental province can be found two potential conflict zones potentially responsible for arriving up SCAD numbers: First is the ancient Zanata (Berber) city of Oujda with a population pf approximately 400,738\(^{21}\), which is disproportionately dense compared to the remainder of L’Oriental and could be responsible for a greater number of the provincial conflict counts.

\(^{21}\) City Population [http://www.citypopulation.de/Morocco.html](http://www.citypopulation.de/Morocco.html) (accessed January 16, 2013)
Second is the touchy and contentious issue of Melila, ostensibly within l’Oriental, but jurisdictionally is a Spanish territory which ‘happens’ to be located inside what Morocco considers its own borders, but which Spain nevertheless administers and occupies. Of late Melila has been a source of much unrest as African migrants have been using Melila as a springboard into Europe, crossing the fenced Moroccan-Spanish borders at night. Much conflict has resulted due to human rights campaigns against Spain which have spilled over into l’Oriental.

Such problems in counting the Berber groups are made more difficult because counting must be done in conjunction with provincial-level populations which, in North Africa, have tended to change considerably even over the past few decades, with jurisdictional changes more frequent in some countries (Libya the most extreme example). Changing boundaries cause subsequent changes in the inclusion or exclusion of Berber groups within these boundaries, while boundaries (and populations) for the Berber groups themselves have also changed, making the end result somewhat questionable.

Short of a Berber ‘census’ it would be difficult to conceive of how best to assess the intra-country and intra-provincial Berber population numbers, densities and population demarcations. Until such data becomes available it might be best to eliminate the ‘number of Berber groups’ from both national and provincial calculations and instead to rely on population, population density and percent for future calculations since the Berber ‘group’ data seems spurious at best.
CONCLUSION ON BERBER REACTIVITY 1990-2011

The original thesis of this paper, that low-level social conflict is higher in Berber regions of North Africa has proven incorrect. It was thought that this type of civic conflict would be indicative of the Berber’s threatened status as a minority ethnic group, when in fact of all five countries looked at, SCAD events were found to be fewest in provinces with known ethnic Berber populations. This trend was most pronounced in Morocco where all four ‘Berber’ population correlations were found to be negative, and measured civic conflict in these regions was actually reversed.

The historical perception of the Berber as unruly and rebellious (Julien, 1966) was seen as good reason that such measurements would be indicative of increasing unrest due to subjugation under recent nationalist schemes and loss of cultural identity under pan-Arab nationalist scheme. As Arab nationalism took hold, Berber linguistic and cultural institutions were viewed as a threat to national integrity and eradication of the Berber culture was seen as paramount to successful nationalism. Berber revolt against such impositions was understandably strong but was mostly restricted to Algeria, and to a lesser extent Morocco. Minority Berber response to the imposition of Arab identity extended beyond the boundaries of national identity to religion itself, rebutting the Arab language of the Qur’an in favor of their cultural identifier, Tamazight. As outcasts in their own land, the Berber minority see the imposition of Arabic in all spheres of their lives as an outrage to personal and ethnic identity. Though they retain a fervent belief in Islam, they choose to express their religion commensurate with their own convictions and tradition, making it ‘in their own image’.

Subjugation of a people, no matter their religious or political affiliation runs contrary not only to core human values, but to the very principles inherent in one’s cultural identity and
ultimately one’s sense of individuality. The Berber have fought a long, uphill battle over the past decades to regain, if only in part, freedom to express their history and culture through the revival of their language and arts. The effects of their efforts, from what little this study has shown, has not resulted in elevated low-level conflict levels (compared local to non-Berber communities). This implies that in addition to being ethnically suppressed, they are suffering this indignity in the absence of their historic spirit of rebellion.

If pluralism is to survive in North Africa a heart-felt look by regional governments at Berber suppression shall have to be addressed. If the Arab Spring is any indication of this generation of North Africans - the Millennials – commitment to democracy and to the preservation of personal freedoms, perhaps the long repressed First Nation of Africans will regain the cultural rights – including the practice of their religion- without threat of recrimination and governmental reprisals.

Across the continent, from Libya to Morocco the Berber were seen since ancient times to have vigorously rejected foreign occupation with violent uprisings under Carthaginian, Greek, and Roman occupation. It was thought that this might still be the case among the Berber today, but has proven otherwise.

This study shows to a limited extent that the Berber no longer express rebellion in the same way as they did during Roman occupation. Old Roman Berber city centers are now far larger cities, and since the Arab conquest inhabitants are no longer Berber but are instead an indiscernible mixture of all subsequent conquests, and because of this admixture, SCAD activity in these areas cannot therefore be attributable to Berber origins alone. To paraphrase Heraclitus (panta rei) - Everything changes and nothing remains still ... so ... you cannot step
twice into the same [city].

What we now see in the larger cities reflects this cumulative change in culture, ideology, and perhaps greatest of all, a far greater interconnectivity in the population due to increased use of mass social media in all sectors of society which better enables SCAD events to arise in the first place.

The plight of the Berber as an endangered ethnic group continues, but it would seem that they are perhaps less threatened in Morocco and Algeria, though not because of their greater physical presence there, but because through the Berber diaspora they have been successful in bringing public scrutiny to their cause, particularly in the international arena. In France, Belgium and other French–speaking countries, the Berber story has been placed front and center on the international stage, globalizing their every issue.

A rough estimate would be that the Berber are most under threat in Tunisia and Libya, and least threatened in Algeria because of their extended presence there on the national. The area around Tunisia’s Gafsa, Médénine and Gabès regions appear to be more SCAD-reactive than anywhere else in North Africa. Can this have something to with Tunisia’s contention that the Berber represent only 1% of that nation’s population and counter attempt by the Berber to demonstrate a presence in defiance of this contention? No Berber census has been undertaken in any of these countries, and Tunisia’s accepted 1% Berber population just adds to the conjecture over fact that each Maghreb country chooses to represent itself as a homogeneous unit, perhaps to better enhance its vision of integrity. Certainly Tunisia’s recent attainments have been commendable. After ousting former President Ben Ali, a constitution was agreed upon and elections undergone. Pluralism in the form of consensus, even from Islamic parties is

1. Heraclitus of Ephesus: The original quote was something like: Everything changes and nothing remains still ... and ... you cannot step twice into the same river, conveying the sense of constant dynamism and change.
an astonishing feat, unheard of in neighboring Algeria where secular rule has prevailed in the face of radicalized Islamic parties. But if pluralism really is the order of the day in forward-thinking Tunisia, how is it that Tunisian Berber are given such short shrift? For all the touting of the 1% figure, low-level conflict events for the period of this study nevertheless predominate in Tunisia’s Berber areas: Tatouine, Gafsa, Gabès, and Médénine, which certainly gives pause in the face of an otherwise, and regionally speaking, unconflicted country.

Libya appears also to be on the upswing of Berber discontent. After Gadhafi’s ruthless intolerance of Berber identity, the current climate in Libya among the Berber appears to be one of catching up for lost time which, hopefully, will be successful. They will have a long road ahead, however, since pluralism in a country which has barely managed not to implode for decades shall prove an almost Sisyphean task. Four decades without discernible government infrastructure, without a bureaucracy to speak of, with no opposing political parties – in essence no civil society, will doubtless mean any Berber cries for parity will be drowned in a sea of accrued social unrest. The single potentially redeeming factor in Libya is money. But that too can work in reverse, for only if Libya can manage to stay clear of strongmen and corrupt regimes will the country have even a passing chance at redeeming social society through a careful building of infrastructure. And that will take time.

Unlike many of the Kabyle Berber of Algeria who have their own universities and many of whom are university-educated, Libyan Berber, on the other hand, tend to be at the lower end of the socio-economic spectrum. Couple this with as yet unformed social reforms, and we can only estimate when long-awaited acknowledgment of Berber presence and participation in the social apparatus will ever take place. If Libya’s Berber, distributed as they are in discrete population centers over the country’s huge desert area, are able to organize themselves into
representative units, they may prove effective cause of their natural social cohesion. Though the Nafusi and Ghadamès Berber have ties with neighboring Tunisia, the Awjilah and Sawknah are particularly vulnerable in their remoteness. But if Libya is in earnest in its claims at achieving a pluralistic society, the Berber shall have to be part of this initiative, for failing to do so risks not only alienating a valuable ally in reconstructing Libya’s societal fabric, but as history has proven, the Berber can be a formidable adversarial foe.

The idea of linking ancient, Carthaginian and Roman-era city centers to current social conflict events was interesting if only to show survival in the face of socio-economic evolutions over the millennia. Most did so and some, like the Kabyles, thrived adjusting to population and economic demands imposed by successive conquests. But the whole premise of determining the plight of the now-threatened Berber ethnic groups in their former strongholds, cities where Berber élite client rulers under Roman rule once administered whole tracts of land in the interior, supervising fellow tribal chiefdoms, appears not to be a viable exercise.

Most of those ancient cities have survived, some have thrived, but the Berber who once peopled these cities have either long-since fled to their mountain strongholds, or have been absorbed into the populations of subsequent conquering peoples. Either way, the ancient Berber cities no longer represent only Berber social and cultural ideologies and behaviours. Instead, current social conflict is seen in ancient Berber sites is an amalgam of conquering cultures - Roman, Greek, and Punic, Vandal, Arab, and French. Besides which, in most cases the prevailing invader culture saw itself as vastly superior to the indigenous Berber ways, and every effort was made to thoroughly erase even the remotest traces of ‘Berberness’. This was particularly the case under Arab rule, where the adoption of Islam and the language of that religion- introduced a de facto language system- quickly made Berber redundant. No doubt a
percentage of Berber still inhabit the old cities, but absent a Berber census by North African countries (which would not be in national government interest, nor are funds available for such endeavours), social conflict in these areas cannot be apportioned according to ethnic population.

Berber population data used in this paper was taken from Ethnologue and, as was noted earlier in the paper, no source was given by Ethnologue for the data itself, nor are dates available for when the Berber population data was amassed nor for when the maps were drawn. Results will therefore have to be viewed critically. What is worth noting regarding the Berber is the correlation between the number of Berber groups and social conflict (SCAD) activity, which is positive and moderate for all but Morocco (and of course Egypt) and which might signify a synergy between different Berber tribes and provincial conflict levels.

Overall, Berber cultural identify remains under threat, and shall remain so until regional constitutions incorporate pluralism into the social order in such a way that it becomes part of daily business. With so many other issues to content with, the regional plight of ‘Berberism’ seems a long way down the laundry list of intra-state problems to resolve. Unless of course the Berber develop greater inter-tribal, trans-national cooperation. Ironically, the historically rebellious Berber appear, from this investigation, to be the least active in terms of social conflict. Even more ironic is that the Kabyle, hotbed of current Berber activism, and home to over five million Berber, is located in North Africa’s least free country for 2014. Despite the rhetoric of reform sweeping across the region of North Africa’s five constituent countries,
Algeria still ranks as ‘not free’ compared with its ‘partly free’ neighbors\textsuperscript{2}, Morocco, Tunisia, and Libya. Noteworthy too is that Egypt was also recently labeled ‘not free’.

\textsuperscript{2} Freedom House Results \url{http://www.freedomhouse.org/country/algeria} (accessed 3/3/2014)
Correlations and correlation coefficient ‘r’. Pearson’s coefficient of correlation, denoted ‘r’, is a measure of the strength of the linear relationship between two variables, x and y, and is computed using the formula listed above. Correlations ‘r’ can be either positive or negative depending on the slope of the correlation. The Coefficient ‘r’ determines the strength of the relationship as values vary between -1 and 0, and 0 and +1, with values closest to 0 being the weakest and those closer to +1/-1 being the strongest. For guidelines on correlations please see the Correlation chart in the Appendix.

Table A.1. Correlation chart.

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<th></th>
<th></th>
<th></th>
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<td></td>
<td>Positive (+) relationship ‘r’ value</td>
<td>Negative (-) relationship ‘r’ value</td>
<td></td>
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<td>0.70 or higher</td>
<td>very strong positive relationship</td>
<td>very strong negative relationship</td>
<td></td>
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<tr>
<td>0.40 - 0.69</td>
<td>strong positive relationship</td>
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<tr>
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<td>moderate negative relationship</td>
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<td>no or negligible relationship</td>
<td>no or negligible relationship</td>
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List of abbreviations:
ac=all countries
acNe=all countries not including Egypt
ALG= Algeria
EGT=Egypt
LIB=Libya
MOR=Morocco
MOR excl 2ct=Morocco excluding the two contested territories of Oued Lagouira & Laayoune
MOR incl 2ct= Morocco including the same two contested territories
TUN=Tunisia

Sources for the following graphs:
All following graphs generated by the author using City Population.de. (accessed 1/10/2013)
**Fig. A.1.** Four country (no Egypt) provincial area distributions (km$^2$ X1,000): Algeria (blue); Libya (red); Morocco (green); Tunisia (purple)., 1990-2011

*Source:* Author’s graph using data from City Population.de. (accessed 1/10/2013)

**Fig. A.2.** Egypt’s 27 provincial populations vs. SCAD/M, 1990-2011

*Source:* Author’s graph using data from City Population.de. (accessed 1/10/2013)

**Fig. A.3a.** Algeria: prov area distribution (X1000 km$^2$), 1990-2011

*Source:* Author’s graph using data from City Population.de. (accessed 1/10/2013)
Fig. A.3b. Egypt: prov area distribution (X1000 km$^2$), 1990-2011

Source: Author’s chart using data from City Population.de.

Fig. A.3c. Libya: prov area distribution (X1000 km$^2$), 1990-2011

Source: Author’s chart using data from City Population.de. (accessed 1/10/2013)

Fig. A3d. Tunisia: prov area distribution (X1000 km$^2$), 1990-2011

Source: Author’s chart using data from City Population.de. (accessed 1/10/2013)
**Source:** Author’s chart using data from City Population.de (accessed 1/10/2013)

![Fig. A3e. Morocco: prov area distribution (X1000 km²), 1990-2011](image)

**Source:** Author’s chart and calculations using data from City Populations.de. (accessed 1/10/2013)

**Source:** Author’s charts for the following provincial population distributions using data from City Populations.de. (accessed 1/10/2013)

![Fig. A4a. Algeria: prov. popul. distribution (48 provinces), 1990-2011](image)
Fig. A4b. Egypt: prov. popul. distribution (27 provinces), 1990-2011

Fig. A4c. Libya: prov. popul. distribution, (32 provinces), 1990-2011

Fig. A4d. Morocco: prov. popul. distribution (16 provinces), 1990-2011

Fig. A4e. Tunisia: prov. popul. distribution (24 provinces), 1990-2011
### Table A:

Algeria: 26 (of 48) provinces with highest corresponding SCAD counts in descending order of provincial-level non-nationwide SCAD counts (final column-highlighted), and also showing nationwide, provincial, normalized and non-normalized values for 1990-2011.

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<th>Prov Name</th>
<th>prov pop</th>
<th>Prov area</th>
<th>Prov den. pop</th>
<th>berber_ pop</th>
<th>% berber</th>
<th># Berber grps (lang)</th>
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**Source:** SCAD data from SCAD database and population data from City Population.de. (accessed 1/10/2013)
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