Blindness and Water Divination in the Saharan West

By

Saquib Ali Usman

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Doctoral Committee:

Professor Andrew Shryock, Chair Professor Webb Keane Assistant Professor Yasmin Moll Associate Professor Erin Pettigrew, NYU Abu Dhabi Associate Professor Butch Ware, UC Santa Barbara Saquib Ali Usman

susman@umich.edu

ORCID iD: 0000-0003-1193-8646

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DEDICATION

This work is dedicated to Muhammad Mahmud wuld Ummar, the great water diviner of the Saharan West, and to my son, Idris Ja'far Rizvi-Usman, whose early departure preceded our own.

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iv

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V

TABLE OF CONTENTS

DEDICATION	ii
ACKNOWLEDGEMENTS	iii
LIST OF FIGURES	vii
ABSTRACT	viii
Introduction	1
Chapter One: Discursive Provisions	
Chapter Two: A Sketch of Conceptual and Physical Geography	53
Chapter Three: The Covenant of Idde: Ummārī Blindness as a Sign of Karāma	
Chapter Four: The Sensory World of the Saharan Bādiya	
Chapter Five: Blind Alterity, or "What difference does blindness make?"	
Chapter Six: Regarding Water Divination	
Epilogue	
Bibliography	

LIST OF FIGURES

Figure I: Hassaniyya Arabic in the Saharan West	
Figure II: Topography of Mauritania	
Figure III: Plume of Saharan Dust	
Figure IV: Genealogical Tree of Ummārī Blindness and Karāma	100
Figure V: Blindness and Sightedness in an Ummārī Khayma	103
Figure VI: Divergence of Blindness and Sightedness	120
Figure VII: Mbārs in Dali Gimba	142
Figure VIII: Qur'an Students Sit Against Wall in Dali Gimba.	152
Figure IX: Full Moon Illuminates Dali Gimba's Night	156
Figure X: Servicing a Car with Flashlights in the Dark	157
Figure XI: Qur'an Students Using Flashlights	158
Figure XII: A Butcher Preparing for Slaughter Before Dawn	162
Figure XIII: Body Orientations Under the Saharan Sun	168
Figure XIV: Midday Napping in an Mbār	171
Figure XV: Visitation during Dahmis Golden Hour in Dali Gimba	173
Figure XVI: Cheikhna Practices Driving a Vehicle	185
Figure XVII: Blind Ummārī Eyes	197
Figure XVIII: Techniques of Detailed Seeing	203
Figure XIX: Mutual Touch and Co-Walking in the Bādiya	220
Figure XX: Exploratory Touch in Assisting a Newborn Goat	222
Figure XXI: Mutual Touch in Dyadic Communication	230
Figure XXII: Sociality of Prolonged Tactile Contact	231
Figure XXIII: A Flock of Camels at a Well in Hodh el Gharbi	252
Figure XXIV: Nomadic Transhumance Migration Patterns in the Saharan West	262
Figure XXV: Water Divination in Boû Steïlé	279
Figure XXVI: Water Is Found	281

ABSTRACT

This dissertation examines the nexus between blindness, water divination, and perception through ethnography. It listens into the world of Dali Gimba, a hinterland village in Mauritania that is inhabited by the Awlād Ummār—a unique clan marked by a dominant inheritance of congenital blindness spanning seven generations. For the Ummār, blindness is celebrated as a sign of divine grace, a source of charisma, and an opening towards miraculous extraordinary sensory attunements. Notably, the patriarch of the clan possesses the renowned ability to sense bodies of groundwater hidden under the earth and has used this kind of divinatory touch to find and establish over 1,000 wells across the arid Saharan West region.

The story of the Ummār and the disability world of Dali Gimba are examined to probe the possibilities thinking *with* blindness. This work explores the material and social contexts that shape sensory and perceptual experiences and considers what difference blindness makes in mediating styles of attending, interpreting, and communicating in various sensory worlds. Blindness is regarded alongside local practices of Islamic and African divination in order to construct a more expansive and nuanced understanding of the varieties of sensory experiences, body-mind arrangements, and perceptual attunements that emerge within social, cultural, and historical contexts.

Introduction

A Miracle of *Miriyās*

A convoy of Mercedes 190s, Land Cruisers, and Prados race along the path from Kumbi Saleh to Dali Gimba. At each village they pass on the ten-minute path, drivers slow down to pulse their horns and rev their engines, leaving behind a trail of dust, smoke, and grungy Mauritanian *madh* (praise) music in their wake. Today they celebrate the marriage (*nikah*) of Cheikhna, the 27-year-old blind son of renowned blind water diviner Muhammad Mahmud, and Naïsha, a young, sighted woman from the neighboring town of Kumbi Saleh. As they arrive in Dali Gimba, the convoy first circles the village, and finally lands at the compound of Muhammad Mahmud, where a crowd of villagers has already begun to amass.

Some cars perform donuts upon their arrival, releasing a plume of petrol and dust in the air. The busy soundscape is sharply punctuated by a rifle shooting a few rounds into the sky. Women who had been anticipating the convoy rush to the lead car, welcoming Naïsha to the village for the first time. They quickly usher her to an *mbār* (gabled house) nearby. Like any married couple, the newlyweds are to remain separate until nightfall, and they usually do not meet until much later, when they will rejoin in their newly constructed tent.

Cheikhna's groomsmen arrive and shuffle him away to a *dar* (single-room house) on an adjacent compound. There young men from every family in the village have gathered to hang out and take refuge from the sun for the remaining hours of the afternoon with a celebratory energy. Hidden from the gaze of older brothers, fathers, paternal uncles, and old *shaybani* (literally,

"gray-haired") men, they are free to relax without having to abide by formal cultural demands of shame (*saḥwa*). They lay on their backs and sides, shifting around and stretching their limbs within the single room house. They sit around, talking and jesting, or admiring each other's new clothes. Some of them consume cigarettes and puff rounds of *manēja* tobacco from wooden pipes. Numerous rounds of sugary green tea (*atay*) are prepared, distributed, and imbibed. Conversations turn into horseplay and wrestling. And music played from cell phones produces an emotive soundscape throughout the night.

Cheikhna sits with his back towards me, immersed in a game of cards called *miriyās*, while I lay on my back recovering from the heavy feast offered by his new in-laws in Kumbi Saleh. A young, sighted groomsman sitting nearby leans over and grabs ahold of my calf to gain my attention:

Ali! — You're a researcher (*bāḥith*). What do you make of this? [*gesturing to Cheikhna*]. A blind man playing Miriyas! How is that?

I heed his invitation and sit up to observe more attentively. Although Cheikhna tells me that the game is just "pokkār," I notice that it is actually a trick-taking card game like Bridge or Euchre. It is played with four players, two sets of partners who face one another as opponents. Players take turns serving as the dealer, shuffling the deck, distributing hands to each player.

I observe as Cheikhna draws his hand, pulling the cards in and away from the potential glances of other players. He lifts the cards immediately to his right eye and strains his forehead to concentrate and calm down the nystagmoid rhythms of his eyes. When looking at things in this way, and with the right light, he could sometimes generate enough focus to glean crude visual distinctions, such as the color or forms on a card. He also traces his fingers on the surface of the cards to ascertain the pips printed on them, which are discernable due to their differential texture. He keeps track of nicks and bends on individual cards in the weathered deck to further

help him to recognize cards. Sometimes, he discreetly consults a bystander to confirm his hand, while remaining wary of exposing his hand to his opponents.

The young men playing miriyas have the habit of announcing each card as it is thrown down. If a player doesn't announce the card himself, someone else quickly identifies it. This customary practice of explicit narrative description of happenings is a regular feature of many everyday interactions in the village. It is a collaborative and accommodative practice of a culture that remains aware of blind subjectivities. In this scenario, it offers an auditory channel to afford blind participation in the game.

These various observations of Cheikhna's activities and the sensory features of the gameplay, however, only reveal conjectures about what could be sensorially possible for him. They do not address the young man's question. They do not sufficiently explain how Cheikhna is able to play the game.

I turn to Cheikhna to verify if these uses of his residual vision, tactile and mnemonic strategies, and accommodative circumstances were what allow him to play the game. He is amused by my account, and retorts, "Sure, but really, what allows me to play this is *ilhām*–it is knowledge that comes from Allah!" The Arabic term ilhām is often translated as inspiration, and is closely related to the concept of divine revelation (*wahi*) which is received by prophets. For Cheikhna, *ilhām* also refers to knowledge derived through intuition and instinct. It could refer to various kinds of sensory and perceptive techniques that he is not consciously aware of, but also from sources beyond his body. Cheikhna further touts his skill in mathematics (*hisāb*) and memory (*dhākira*), which he claims to use to keep track of the distribution of the deck and strategize his gameplay. This strategy of counting cards guides his sensory practice of reading

his hand by limiting the range of possibility for each card and helping him decide what any combination of cards might be.

The game finishes. Cheikhna and his partner win the hand by a single trick. Swelling with pride, Cheikhna declares, "Indeed, it was Allah who granted me with a special gift (*mawhiba*) to win this game!"

The young man who first called on me to observe Cheikhna takes the opportunity to poke fun at the groom:

Aha! So, this is the *karāma* (miraculous ability) that Allah granted to Cheikhna! To his father, Muhammad Mahmud, Allah graced him with the gift to see water hidden under the earth and found thousands of wells for the people across the lands! How great is Allah's will! As for Cheikhna, Allah, Magnificent and Glorious is He—He gifted him with *karāma* of miriyas!

At this, the room erupts in laughter, with friends slapping Cheikhna on the back. Cheikhna responds, "Allah chooses whatever He wills." He switches out of the game and diverts his attention to lighting a cigarette drawn from his breast pocket. Another game forms, this time with all sighted players, who continue to call out the cards as they are played.

~*~

This dissertation is an attempt to relate to blindness in Islamic, Saharan, and Arabicspeaking worlds through ethnography. It peers into a distinct world of blindness situated in Dali Gimba, a hinterland village in Mauritania inhabited by the Awlād Ummār, a clan of people with a genealogical inheritance of blindness for the past seven generations. For the Ummār, blindness is celebrated as a *karāma*, a miraculous grace gifted to the family from Allah and a source of social capital and extraordinary sensory attunements. The most famous of these miraculous attunements is the divinatory ability to sense water, which was possessed by Cheikhna's father, Muhammad Mahmud (1942 - 2022). As the young man in the story mentioned, Muhammad Mahmud is credited with using this ability to find over 1,000 wells in locations spanning across the arid region of Mauritania, Mali, and the Western Sahara.

Through the vicissitudes of fieldwork between 2017 and 2021 in Dali Gimba, among the Ummār, and in close proximity to Muhammad Mahmud, I encountered various questions regarding the senses and the relationship between blindness, sight, and divination. Through this ethnography, I examine domains of everyday life, the local sensorium, ritual, and communication, and address issues related to kinship, Islam, orality, genomic research, disability, and the environment. This study takes blindness and divination as two points of departure to reframe our understandings of sight, sightedness, and the senses.

The anecdote presented above highlights several key themes articulated in this research project. What difference does blindness make? How do the blind sense the world? How do they understand and represent themselves and their activities? More generally, how is the world sensed for anyone? What does it mean for skill in playing cards, the ability to divine water, or blindness to be understood as a karāma?

The anecdote also shows how my role as a "researcher" in Dali Gimba was considered and recruited by villagers to draw attention to blindness and interpretations of its meanings and how it shapes alternative ways of attending to the world. It provides a window into my observational practices of sensory activities, as well as the limitation of these modes of inquiry when confronted with the indeterminacy of sensory experience and worlds of experience that lay beyond my perceptive abilities. Finally, the story introduces the concept of karāma, which is a central theme in this dissertation. While most of my attention is dedicated to the karāma of water divination, this opening anecdote shows how karāma mediates a wide variety of activities such

as playing cards and draw attention to how this perceptive capacity relates to social roles, knowledge, and power.

Discovering the "Village of the Blind"

I did not intend to research blind card players or water diviners in a Saharan village. What originally sparked my scholarly interest was discovering the little-known history of blind literati in the Islamic world and in Arabic literature, and especially at the al-Azhar University in Cairo, Egypt. (A glance into this history is provided in Chapter Two.) Such a history of blindness did not exist in Europe or other world regions. I was curious to understand how Islamic sensory ideologies, Arabic literary culture, or local understandings of disability may have accommodated such a tradition of blind intellectuals and performers. It also seemed that such communities of the blind may have been obscured from the historical record (which privileges writing) because of their unique relationship to orality. Anthropology and ethnography seemed to offer unique tools to listen for the voices of the blind.

I was motivated to conduct ethnographic research on contemporary blind communities in Egypt. The beginning of my graduate studies at Michigan in 2015, however, coincided with the transfer of power to Abdel Fattah el-Sisi in Egypt, which consequently led to the souring of the United States' diplomatic relationship with the country. Within the year, most of the usual funding programs for conducting research in Egypt were suspended, and the country became an untenable¹ location to conduct research for the coming years.

In light of these circumstances, I instead headed to Morocco to alternatively survey the landscape of blindness and seek connections with blind communities there. During a summer of

¹ Anthropologists of the Middle East and North Africa have commented on the various ways that the production of social and cultural research on the region is shaped and disciplined by trends in U.S. foreign policy. "Anthropology's Politics" (Deeb and Winegar, 2015).

fieldwork there, I spent time with two blind communities. The first was a group of blind mendicants who regularly gathered at the mausoleum of Abu 'l-'Abbās al-Sabtī (d.1204), who is revered as the patron saint of Marrakesh. The gathering of blind men is an iconic feature of the shrine, and have been for centuries (Vaffier 1918).² Throughout the week, a group of thirty men gather in a special room between the shrine and the masjid where they can be heard cantillating passages of the Qur'an or poems praising the prophet in unison. The blind play an important role in the *ziyarat* (pilgrimage) economy through the exchange of charity and supplications that are customary in the ritual practice.

The second group I engaged with was a community of young blind activists living in Fez who were university students, writers, and musicians. From these activists, I learned how older infrastructures of blind education at the *Qarawiyyin³* had disappeared over the past several decades as a result of the immense social changes in Morocco. The historical traces of the Qarawiyyin's blind students could still be felt on the alleyways of the old city, where there are special bolts installed on the walls that meant as tactile markers to guide blind pedestrians through to the mosque-university. The youth explained to me how their activist efforts sought to establish new spaces and roles for the blind in society, improve accessibility, pass legislation, and increase awareness to reduce the stigma of blindness in society.

Discovering Dali Gimba

I first learned about Dali Gimba by chance. I had been searching online for blind spaces and communities in other regions like Egypt and Morocco when I came across a news article

² A superfluous number of clocks are another distinguishing feature of the mausoleum.

³ The *Qarawiyyin* mosque-university built in the 9th century in Fez is one of the oldest institutes of higher education in the Islamic world.

titled, "The Village of the Blind in Mauritania," published by the pan-Arab online news outlet, "*al-*'*Arabī al-jadīd*," in English as "*The New Arab*."

The article provided an account of a "village of the blind" (qarīyat al-'umyan) located in a remote province of Mauritania whose inhabitants are overwhelmingly blind. The article had a sensationalist and exoticizing perspective that invoked cliched metaphors of blindness emphasizing the misery (ya'is), poverty (faqr), and isolation ('uzla) of people in the village. I would later discover that several of these notions and other facts presented in the article were false or misleading.⁴ I quickly recognized the tragic and redemptive style of writing about the village in the article which is common to so many similar stories of disabled people and communities, I was drawn to the story because of one sentence that stated that some blind elderly people of the village work as professional water diviners hired to locate ideal locations for wells around the country, and that they believed this to be a gift from Allah associated with the blindness.⁵ I was unable to find additional sources about the village except for secondary or tertiary news stubs that appeared to rewrite the story as extrapolated from the original article. These sources offered further fictitious and contradictory information, such as one blog post that attributed the blindness to unclean water. This is not to say nothing was published. I would later find more news media that used different spellings of the village's name, and other news articles and reports about the village that left it unnamed.

⁴ For example, the article reported that government inaction was the root cause for the widespread inheritance of the blindness, when only a few villagers held this kind of view. The article unproblematically stated that Ummārī blindness is curable and has been cured in the past. Most villagers however contested claims of curability and resisted government and public health interventions seeking to eliminate the blindness. These tensions are explored in more detail in Chapter Three. The article also suggested that blind Ummārīs have no light perception and cannot distinguish between the day and night, when in fact their blindness is the result of congenital cataracts which afford some "residual vision," which is used, for example, to perceive bright sources of light. Above all else, the article's tragedy-oriented representation of blindness is at odds with local representations of blindness. Most villagers, both blind and sighted, viewed the widespread inheritance of blindness as a natural fact, and in fact as a blessing from God that is socially and metaphysically advantageous, and not needing intervention.

⁵ I later learned that the ability of water divination was exclusive to Muhammad Mahmud, and no one else was known to possess the skill among the Ummar, at least at the time of my fieldwork in 2021. In turn, I learned that the karāma came in many different forms beyond water divination.

In 2017, I decided to travel to Mauritania to conduct exploratory research surveying the landscape of blindness in the country generally, and to scope out whether Dali Gimba could be an appropriate place to conduct a long-term immersive ethnographic research project related to my interest in blindness. I was not sure if I would even be able to find the village, or if it even existed for that matter. At the very least, I thought, I could learn more about blindness and blind communities in non-metropolitan contexts of the Islamic world, in societies of the Sahel and in rural and pastoral environments, as opposed to the urban and institutional settings of blind education where I had previously been focusing my research.

I certainly didn't know that appearing in the village would lead to an open invite to stay, live, learn, and return to the village numerous times for following years, forging intimate connections that will remain for the rest of my life.

Reaching Dali Gimba

To frame this study, it is essential to first contextualize the location of Dali Gimba, and the arduous journey required to reach there. The village is located in Mauritania's easternmost frontier, in the province of Hodh ech Chargui. From the capital city Nouakchott, where the international airport is located, Dali Gimba was reached through automobile transportation across the *Tariqat al-Aman* (or the *Route d'Espoir*), a 1,000 km highway that stretched eastward from the capital along the southern border of the country.⁶ Flights to the local provincial airport

⁶ Mauritania is connected by four highways that come together in the shape of a letter "K," with Nouakchott at the center. Vertically, north-south highways run along Mauritania's Atlantic coast, connecting Nouakchott to Nouadhibou and cities in the Western Sahara and Morocco. Southward, the highway leads to Rosso and Senegal. The northeast direction cuts through the rocky gorges and sand dunes of the Adrar massif to connect to cities and towns such as Atar and Chinguetti, which is an ancient town that gives the region its name in Arabic, "al-Shinqīt." This route then flanks around the territory of Western Sahara, and then northward into the region of Triss Zemmour, a Saharan frontier province between Mauritania and Algeria. Finally, the southeastern leg of the "K," proceeds along the *tariqat al-aman* that passes through cities in the southern Sahelian region of the country such as Boutilimit, Aleg, Guérou, Kiffa, Ayoun el-Atrous, and finally to the Hodh ech Chargui towns of Timbedra and finally Néma. From there, the road extends unpaved further to the refugee camp at Bassikounou, and across the border to the Azawad region of Mali and the city of Timbuktu, which is located around 400 km away from Néma.

in Néma had been discontinued for a number of years, so the highway has been the only means of accessing Dali Gimba. The journey takes about thirty to fifty hours, depending on whether one takes a coach, microbus, or by driving in a personal vehicle. The route stops along numerous interior cities along the way, especially for food, prayer, and naps. The difficulty of the journey to the Hodh is dreaded by locals. A deputy governor stationed in the town of Djiguenni in Hodh ech Chargui told me that he refused to make the journey more than once in three weeks and would never make his wife and family go on the journey more than once a month due to the fatigue caused by the transportation.

Once I arrived in Nouakchott, I spent a few days looking for references to Dali Gimba, to no avail. I took the microbus all the way to Néma in search of locals in the Hodh ech Chargui who might have known about the village. There, I learned that the village was in an area of the province that branched off the *Tariqat al-Aman* near Timbedra, the penultimate town along the highway, I caught a ride back, and there, I finally found people who knew of the blind family and Dali Gimba. I found ride to Kumbi Saleh, which was only about nine kilometers from the village with a pick-up driver who offered to drop me off in the village the following morning. This journey proceeded off-road along weathered pathways that connected networks of villages located to the south of the highway. This movement penetrated into a deeper layer of the *badiya* (hinterland), where 2G connectivity and the last bar of telephone service soon disappeared. It was the *kharif* (rainy) season, which meant that sandy and rocky terrain of the environment were transformed into verdant grasslands and seasonal watercourses that dotted the landscape.

I reached Dali Gimba in the morning and was led to the mbār of Muhammad Mahmud where I met other villagers. From them, I heard the Covenant of Idde, which is the local account

of the origin of Ummārī blindness as a prophecy that discloses its true reality as a karāma—a source of the grace, charisma, and miraculous ability granted by God.

I introduced myself and my research interests in blindness in the Islamic world, and shared how I learned about the village through the internet. After spending the day and night in the village, I requested permission to come back and live in the village for my dissertation research. Graciously, villagers accepted my gratuitous request and welcomed me to stay as long as I needed. I returned there the following year for a longer duration and spent a total of thirteen months in and around Dali Gimba between 2017 and 2021. The ethnographic present of this monograph is set during this time period.

Three Loci of Fieldwork

1 - The Awlād Ummār

The Ummār clan (*fakhdh*) is a unique "ethnos" to consider in this study because blindness is central to their self-understandings and constitution as a family. They are a name/space based in shared kinship, genealogy, blood, and shared blindness.

Ummāri blindness is genetic. Blindness is not just a quality of individual eyes and bodies, but something inherited through shared blood. With its dominant pattern of inheritance, blindness bifurcates the clan into two categories: the blind (${}^{i}\bar{a}m\bar{a}$) and the sighted (*mubşir*). Blindness⁷ is transmitted genealogically and maps its own genealogical relationships and systems of relatedness. Blindness acts as a public sign of this privileged inheritance within the clan. Its mode of transmission ostensibly corresponds to local Saharan kinship norms regarding genealogy, segmentation, and patrilineal descent.⁸

⁷ An observed condition, or "phenotype."

⁸ Views from the perspective of genomic research, as presented in Chapter Two, however, classify its transmission as being autosomal, and not sex-linked.

The story of blindness among the Ummar and its transmission is essentially a family narrative. It is a source of distinction. As one Ummārī man told me, "we are blind, but unlike others who are blind." For them, blindness provides a means to connect with God. They would often emphasize their difference and non-association with other groups of blind people, and divergence over political goals and aspirations. Over seven generations, the Ummār have developed a distinct blind culture, with specific habits and specialized social roles within their broader community.

Ummārī self-representations and accounts of their blindness are exceptional because they diverge from dominant understandings of blindness that derive from biomedical perspectives that consider blindness as a pathological condition of individual bodies. Additionally, they also stand in contrast to critical perspectives on blindness that commonly arise from disability studies, which approach blindness as a socially constructed category of difference that results in the social exclusion of blind people from the dominant ableist society. The Ummar draw upon symbolic and metaphorical representations of blindness (such as "blindness as a miracle") and draw on a kind of redemptive narrative in their own self representations. These representations of blindness, however, are vociferously shunned by a number of disability groups and advocates, especially coming from Western or metropolitan contexts. The Ummar cherish their blindness. For them, it is a fertile ground of perception, a source of agency, knowledge, social capital, and connection to God. It is something to be revered as a valuable gift and opportunity. For this reason, medical projects seeking to treat, cure, or eradicate their blindness have been wholeheartedly resisted by most villagers sighted and blind.⁹

⁹ Ummarian blind culture could be compared to "Deaf" culture espoused by communities who resist the pathologizing of deafness. Deaf activists reaffirm their particular sensory attunements as normal and essential forms of human and linguistic diversity and reject and resist programs of rehabilitating deafness with cochlear implant medical technologies (Sparrow 2005, Padden 1980).

As a group, I do not approach the Ummār as just a source of ethnographic "data" on the personal and everyday experiences of blindness. During my fieldwork, they shared deep reflections about themselves as blind people, sensory hierarchies, and the politics of the senses. They offered theorizations based in Qur'anic and Arabic discourses regarding the sensory perception, the meaning of blindness, epistemology, and other larger questions addressed by this research project. In this monograph, I refer to them as "interlocuters," "informants," and "research collaborators."

2 - The Village of Dali Gimba

Since the 1980s, the Ummar have settled in the village of Dali Gimba. Prior to that, they were pastoral nomads (*baddu*), who lived in tents and caravans that migrated seasonally across the southern shore of the Sahara with their goats, camels and other livestock. In the 1980s, severe drought and other social and environmental conditions led to waves of sedenterization across the region and the Ummar traded in the migratory (*irtihali*) life for permanent domiciles and "settled"¹⁰ (*hādar*) life in the village of Dali Gimba. By the time I conducted my fieldwork in 2020, the inheritance of blindness in the family had reached its seventh generation after Idde. The village is the primary residence of the Ummar, but it has grown to attract residents from other clans, tribes, and ethnicities. Today, blind villagers are a third of the village's population of around 200 people.

Dali Gimba has a high proportion of blind residents. As such, it constitutes a distinct "disability world," as defined by Rapp and Ginsberg in their *Annual Review of Anthropology*

¹⁰ The immobility of sedentary village life must not be overstated, as habits of the nomadic life remain evident in everyday Mauritanian life. Men still often migrate seasonally, spending most of the year outside the village, although now they do so to find work opportunities in Nouakchott, or more likely in other African countries such as Mali, Ivory Coast and Angola. Although blind men travel outside the village, they typically reside in Dali Gimba. Although society is formally patrilocal, and women move to the village of their affinal families after marriage, in practice, they often spend considerable amounts of time in the village of their natal families, such as times when their husbands are away or other special times such as during pregnancy or in the post-partum period.

article where they envision a call for studies of "Disability Worlds" that explore diverse sociocultural and political contexts of disability and use these perspectives to enrich general understandings of human nature (2013).

I use the concept here to express the notion of a spatial and social domain where blindness is especially prevalent. It is an exceptional space with a microculture where sightedness is not taken for granted, and differential ways of seeing are taken as facts of life and accommodated in interactional spaces. Places like these have been known to exist in special spaces and times. One famous example is the island of Martha's Vineyard in Massachusetts, which was known historically for its high proportion of deaf people.¹¹ Deafness became such an integral part of daily social life on the island that both deaf and hearing people were fluent in the local village sign language (Groce 1985).

Unlike many of the institutional spaces frequented by blind people (such as special schools, rehabilitative clinics, and hospitals), where participation is largely delimited by age or gender, or particular class, in Dali Gimba the blind are of mixed age and gender. Blind Ummārīs are ethnically uniform, but they do vary somewhat in social class. Some blind families owned their own cattle herds or practiced some profession or service. Some relied upon *zakåt* (mandatory Islamic alms), *sadaqa* (supererogatory charity), or other kinds of assistance or gifts to make ends meet, while others paid alms and distributed charity to others. A few memorized the entire Qur'an, but most knew only a few short chapters.

In many ways, Dali Gimba is an ordinary village. It was settled by its current inhabitants in 1984 just like countless other villages that sprang up in the region at that same time. Everyday

¹¹ Deafness on the Martha's Vineyard was the result of an inherited, autosomal recessive condition which spread during an era of isolation and increased endogamy. The prevalence of deafness peaked in the 19th century, when a reported 1/155 of the residents of the island were deaf, with higher concentrations on smaller scales within the town (Groce 1985).

life in the village largely resembles other nearby villages where I also frequently visited. Its inhabitants face similar social and economic issues, such as water precarity, but differed in other categories, such as by race, or business activities. Yet, Dali Gimba is an exceptional village because of its blind residents. During my fieldwork, I discovered how the establishment of Dali Gimba was an intentional project, led by Muhammad Mahmud, to build a supportive home for all blind Ummārīs, who he recalled as being "weak and scattered in different caravans" during the former "age of nomadism." The prominence of blindness has also created alternative sensory conditions and habits in the village and its surrounding region. The village is an accommodative space. It is loud, and people have the habit of narrating things happening in the visual field.

While in Dali Gimba, I conducted multi-sensory ethnography, looking at everyday interactions and examining the spatial, cultural, and ecological circumstances of sensing. I gave special attention to how identities and experiences of blindness and sightedness are shaped by kinship and other social structures.

Although I concentrate on Dali Gimba, many of my most important insights came from interactions that occurred outside the village. I followed villagers as they travelled for various purposes such as work, commerce, visitation. I accompanied them when they fetched water from wells in neighboring villages and went to weekly markets in other towns. I accompanied Muhammad Mahmud on long trips to Nouakchott for medical care, or on a water divination call. Traveling with blind Ummarians and watching them navigate spaces outside of Dali Gimba helped me understand what accommodative circumstances were special to Dali Gimba as compared to other spaces in Mauritanian society. In contrast to popular images of its "isolation," the constant movement in and out of Dali Gimba also revealed the inter-connectivity of social space in this region.

As the Ummārīs have increased in fame nationally and internationally through news media attention or through Muhammad Mahmud's work as a water diviner, Dali Gimba has become a target of local and global projects of development and charity, public health interventions, rehabilitative efforts, and social service projects. Blindness has thus served as a conduit of funds and has brought a unique global connectivity to Dali Gimba and offered a means of connection especially to its blind inhabitants. Despite the particular quality of global connectivity of Dali Gimba related to its blindness, such connectivity is in fact commonplace for seemingly remote places, especially in regions such as the Sahara or the Mediterranean which are particularly contingent upon far-flung connectivity as a fact of life (Scheele 2013, 2020; Horden and Purcell 2000, Ben-Yehoyada 2017; Ardener 1989).

3 - The Person of Muhammad Mahmud, the Blind Water Diviner

Muhammad Mahmud stands at the center of this ethnography. His role as a blind water diviner draws together my primary concepts of blindness, sight, and divination. His life history and service as a water diviner offers a unique window into the contemporary history of Mauritanian hinterland and the transition from pastoral-nomadism to settlement in new village networks. As an informant, he was a vast source of information about hydrology, environmental knowledge, and tribal, pre-colonial, regional, and national history. For Muhammad Mahmud, water divination was not simply a way of *knowing* the environment; it was a transformative mechanism that "enlivened" the environment and helped people reimagine the possibilities of living in the region.

Muhammad Mahmud's role as a Qur'an reciter and his passion for the Qur'an was inseparable from his labor as a water diviner. He audibly recited a generous portion of Qur'an throughout the day and night. He told me once that he disliked going more than four days

without completing a full of the entire Qur'an. On a typical day, he recited five to ten sections $(ajz\bar{a})$ the day.¹² A number of people endearingly referred to Muhammad Mahmud as being a "Walking Qur'an," or affirmed that he was certainly from the special class of "people of the Qur'an" (*ahl al-Qur'ān*).¹³ Dialogues with Muhammad Mahmud would inevitably shuttle between conversation and return to recitation. This perpetual Qur'anic soundscape around him was further attenuated by his role as a Qur'an teacher in Mauritania. His presence also came with a cacophony of Qur'anic recitation by students who gathered on his property to study and memorize the Quran. Their voices could be heard reciting in his vicinity at various times in the day and night. Students individually approached him to get his individual attention to attempt to recite their completed segment of recitation, without any mistakes or hesitations to gain approval to write the next section. Muhammad Mahmud also animated the Qur'an by having the tendency of artfully citing Qur'anic verse in everyday situations and conversations.

Through my interactions with Muhammad Mahmud, I came to discern water divination as a crucial practice that articulates Islamic, philosophical, and scientific thinking in local Saharan environments; several of its basic ideas are found across the Islamic world. Rather than dismiss water divination and invisible worlds as a kind of irrational or magical thinking, or a product of false consciousness, I take it seriously and attempt to understand the contexts in which locals turn to it as a practical solution to social and ecological problems (Kohn 2013; de la Cadena 2015; Pettigrew 2023).

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¹² This length corresponds to roughly 100 to 200 pages of the modern standard Arabic codex that is just over 600 pages in total.

¹³ Across the Islamic world, and especially in West Africa, people who had embodied Qur'anic knowledge are often called "Walking Qurans." The term derives from a quote by ' \bar{A} 'isha, who said about her husband, the prophet Muhammad, "He was the Qur'an walking on the earth" (Ware 7).

Muhammad Mahmud's immediate "tent" or family (*khayma*) family generously hosted me and some members of my family on their property for most of my time in Mauritania. At first, I lived in Dali Gimba with my wife Salmah. We arrived in the village a few weeks after the sudden death of our first child Idris. His death occurred a few days after his due date and harrowing near-death experience of labor for Salmah. For us, the village was a salubrious place of refuge, and the hospitality of its inhabitants were instrumental in our healing. Women and men from the village shared countless stories of their own infant losses. This exchange certainly came as a potent source of collective healing and remembrance. Later, for several weeks, my younger brother Ahmed came to live in Dali Gimba. He offered his assistance in doing research and found his own way of connecting with the village. By living in close proximity for a few years, my relationship with the family and other villagers grew ordinary, intimate, familial, and trusting.

The intimate context of this engagement gave me a unique opportunity to see the everyday family life of a prominent water diviner, and the public and private lives of blind and sighted family members. Over time, I was informally adopted and into the *khayma* of the Ummar. This positioning oriented my social location, and influenced how I was received by locals and the vantage points where I was able to approach social realities.

Ethnographic research using the comparative method can consider any variety of scales in a particular social field. Each arrangement finds a unique perspective and forges different kinds of social relationships for the researcher in the field. At times, ethnographic studies focus on an ordinary field context to extrapolate about general qualities of broader fields, as samples that represent the population. This research project depends, to a great extent, on an individual person, Muhammad Mahmud wuld Ummar, as a lens to see entire worlds and reflect on the

process of seeing itself. It takes the Ummar, Dali Gimba, and Muhammad Mahmud not as ordinary sites, but as extraordinary examples that test the limits of theoretical conceptions about blindness and sight.

Three Themes of Investigation

1 - Ways of Seeing

The concern with understanding differential ways of seeing and understanding the limitations of observation are recurring motifs in the discipline of anthropology. Bronislaw Malinowski, who is often credited with solidifying the role of long-term immersive participant observation in anthropology stated that this method provided the necessary conditions "to notice what goes on, to grasp the native's point of view, his relations to life, to realize his vision of his world" (1922: 25, original italics). With Franz Boas, this concern with the "native's" "point of view" (their worldview, or weltanschauung) began as a literal question--about the psychological and physical aspects of human vision, which he explored through his incipient study on how people from different cultures see the world, and in particular, the color of water. However, his concern turned away from the senses "to focus on the importance of distinct forms of cultural association through which new sensory experiences were given meaningful import in different cultural formations" (Porcello et. al. 2010, 52). Interpretive anthropologists redefined the practice of "observation," from its traditional focusing on explicit features of native social life to the implicit contexts that make social action meaningful. This model of observation was represented as a visual practice, especially through the motif of reading. Clifford Geertz evokes this image in his vision of the anthropological project, stating, "The culture of a people is an ensemble of texts, themselves ensembles, which the anthropologist strains to read over the shoulders of those to whom they properly belong" (1973, 452). With the "crisis of

representation" faced by the discipline in the 1980s, the integrity of observation and its potential to produce empirical knowledge came under scrutiny. These voices criticized the potential of the positivistic gaze on "others" to produce any kind of objective reality. However, this post-modernist approach advocated "writing culture," which Howes argues further "distracted attention from sensing cultures" (2013). Other scholars from the field of the anthropology of the senses revived interest in the importance of senses in understanding cultural experience, through cultural, phenomenological, and materialist approaches (Porcello et. al 2010).

2 - Blindness

This project approaches blindness as something, *good to think with*. Blindness is a concept tightly wound with symbolic associations that are conceptually blurred with its literal connotations, in both English and Arabic. It serves as a crucial counterpoint to the idea of sight, and thus provides a unique way to approach questions about differential ways of seeing and the capacities of observation.

Ethnographic research with blind people draws attention to multi-sensory domains of life and self-conscious reflection on the sensoriality of language and communication with interlocutors. It frames an alternative sensory mode that highlights both "non-visual" modes of sensing such as hearing, touching, and smell, but also visual modes of sensing. Cultural beliefs and customary social roles for the blind people also reflect how a society understands and values the senses.

My research with blind and sighted interlocutors in Dali Gimba revealed how blindness and sightedness are socially constructed, relational categories of difference produced in interactional space and multi-sensory environments. Moreover, it also showed how blindness is

not excluded from sight, because sightedness is punctuated with blindness, and blindness is punctuated with sight.

3 - Divination

If the idea of blindness is typically conceived of as a lack, absence, or deficiency of sight, then the idea of divination, is alternatively conceived as an *excess* of sight and ordinary forms of sightedness. Blindness and divination considered together in this study frame a critical lens through which to examine the boundaries of sight and sightedness. Alongside practices of divination, the various encounters with hidden, invisible, and unseen domains of activity further highlight the sensuous and spiritual interfaces and paradoxical tensions of visibility and invisibility.

Ethnographic studies of blindness and divination are like akin to studies of "dreams, visions and miracles," which Amira Mittermayer suggests are topics that, "[highlight] the limits of empiricist methodologies and the importance of attentive listening, which needs to include an awareness of silences and attunedness to the invisible" (2007, 112).

As a sighted anthropologist, spending time with a blind-seer $(bas\bar{i}r)$ like Muhammad Mahmud, and with other people with sensory attunements different from my own, I came to understand myself as a "sighted" observer aware of the partial and indeterminate status of his own perceptive capacities.

Genomic Research Project

In 2018, I met a Mauritanian man during a visit to the newly built Museum of Black Civilisations in Dakar. When I began to tell him about my research in Dali Gimba, he surprisingly told me that he already knew about the village as he had just seen a news program on TV about the village. He told me that the news segment was reporting on the culmination of a

genomic research project that discovered the biological basis of blindness. At first, I could not believe it. I had already spent a few months doing research and living in Dali Gimba but had never heard about any research project. I immediately called an Ummāri, who confirmed the story. A delegation of epidemiologists and ophthalmologists from Nouakchott led by a Mauritanian woman named Mouna Hadrami had come the village one day in 2017. They took biological samples from many villagers and left. He did not know anything more, nor had he heard about the news program. He gave me Hadrami's phone number.

After reading Hadrami's paper (Hadrami et. al. 2018), watching her media appearances, and interviewing her, I discovered how she was more than just a genomic researcher, but she had also taken up the role of a divisive public activist on the issue of Ummārī blindness. This also helped me understand why villagers had not told me about her. Her research sought to redefine Ummāri blindness as a genetic mutation that was curable through surgery. Villagers mostly felt coerced into the study, challenged the validity or relevance of her findings, and rejected the prospect and invitation to surgical intervention. The coincident occurrence of the genomic project had significant effects on my research work. In the wake of the project, many villagers were distrustful of aspiring academic researchers. I faced an uphill struggle in achieving rapport. Also, I came to occupy an intermediary position between the genetic researchers and the villagers, serving as an adjudicator, communicator, and mediator within this tenuous, mistrustful, and hostile relationship. Details on this encounter are presented in Chapter Three.

Gulf Humanitarianism

Each year, a charity exhibition called Ataya is held by the Emirates Red Crescent under the patronage of the Emirati princess Shamsa bint Hamdan al-Nahyan. Each year, proceeds are dedicated to a different cause. In 2018, "This human ordeal [of Dali Gimba] won its deal of

Ataya's attention" (ERC, n.d.), and nearly 2.5 million USD generated by the annual event was dedicated to a massive village rebuilding project just a kilometer away from Dali Gimba. The project consisted of deep artesian well, a mechanical pump, a water tower for storage, forty new cement houses arranged in barracks, a new masjid, and numerous other buildings for housing a clinic, a trade-school, and a four-classroom schoolhouse.

For much of my fieldwork in 2018 and 2019, this project was underway and being constructed in the background of the village Migrant workers from Nouakchott and Mali and truckloads of materials were brought to the village for the project. The development of Ataya was by far the most common subject of discussion during my time in Dali Gimba. Villagers voiced suspicion and criticism of the project's local manager, a man from Nouakchott who was notorious for his absence, poor communication, inability to solve problems, and neglect in paying workers. Some locals would often enlist me to act as an investigative journalist to hunt down evidence of corruption. They argued that I could publish material online about how the villagers were being defrauded and draw attention of the public. This development project, its implications, its aftermath deserves a comprehensive analysis, however, this topic lies beyond the scope of this dissertation and is only addressed circumstantially. The epilogue offers brief insight into the aftermath of the project.

Dissertation Structure

Chapter One sets the stage of the dissertation by offering discussive foundations of this research project. It provides an overview of the various discourses on blindness from philosophical, medical, social, and disability approaches, as well as the anthropology of the senses, and notes points of departures that this project takes from them.

Chapter Two traverses the historical and cultural backdrop of the Saharan West and offers a window into the rich history of blindness in Arabic-speaking and Islamic contexts animated in this monograph. It explores how this work presents an oblique commentary on already formed notions about Islam, Sufism, ocularcentrism, orality, and the anthropology of the "Arab world" that I brought with me to the field.

Chapter Three presents the local self-understandings of Ummārī blindness through the lens of the often retold "Covenant of Idde." I analyze how this origin story frames blindness as a sign of *karāma* which generates divine grace, charisma, honor, and various miraculous "extraordinary sensory attunements." It examines the genealogical transmission of blindness and considers the question of blind sensory compensation. Lastly, this chapter also considers how local understandings of Ummārī blindness have responded to alternative representations deployed by projects informed by biomedicine and global health.

Chapter Four offers a textured description of the local sensory world of the Saharan hinterland, or "bādiya." It explores how sensory activities and experiences of blindness are shaped by social and cultural factors, as well as by the tangible qualities of the natural and built environment. This chapter pays close attention to the multisensory rhythms of the night and day in the Saharan landscapes, and how discourses and sensory ideologies shape perception and interpretation of the world.

Chapter Five addresses the question of blind alterity, or "what difference does blindness make," through a semiotic analysis that examines how blindness mediates a distinct style of interpreting and communicating signs in the world. It scrutinizes various everyday activities of Blind Ummārīs, such as the use of residual vision, apprehensions of visibility, navigational practices, exploratory and mutual touch, blind linguistic norms, habits of blind speech, and blind

systems of education. Through this analysis, I write against conceptions of blindness as absence or lack of sight, by showing how blindness leads to special ways of using both the non-visual and visual senses, and enables alternative ways of being, interpreting, and communicating in the world.

Chapter Six examines the life of Muhammad Mahmud as a historical lens to trace the evolving social role of water divination in the contemporary history of the Saharan bādiya through collaboration with a Sufi mystical leader in projects of well development that were integral to the transformation of the landscape and the transition from nomadism to sedentary life in villages. It explores how Muhammad Mahmud understood of water divination through a Qur'anic conception of the hydrological cycle and outlines the ethical framework that guides the practice. Finally, the chapter offers my firsthand observations of water divination in action and explores how it functions as a form of sensory engagement, prophecy, and a miraculous act that is interpreted through its practical outcomes. This account underscores how water divination transcends conventional sensory limitations and unveils its truth through the vibrant social dynamics it fosters.

Chapter One: Discursive Provisions

Vistas of Blindness

Blindness is a concept densely loaded with meanings. In societies around the world, blindness looms large in the cultural imaginary and serves as a powerful symbol that "inspires philosophical debates, theories of perception, religious traditions, cultural mythologies, literary representations, and folklore" (Hammer 2019, 4). In the words of Lakoff and Johnson, blindness is an essential "metaphor that we live by" (1981), in that it does not just function as a linguistic expression but serves as a fundamental building block in our worldviews and cognitive structures, especially regarding sight, the senses, knowledge, and the nature of social difference itself. In this section, I review various approaches to blindness, and show how they produce a discursive field for this ethnographic work. This review is meant to show the evolution of scholarly research on blindness, and show how this study intersects, engages with, draws upon, and departs from these approaches.

Blindness in Western Philosophy

Western philosophy has a longstanding interest in hypothesizing about blindness and blind experience as a means of conceiving sight, sightedness, the senses, and knowledge. In most philosophical discourses, however, taking blindness as an object of study has typically proceeded through the imaginations of blindness by sighted philosophers from their "armchairs," with scant reference to the actual experiences of blind people living in the world.

Debates over blindness were an especially salient feature of philosophy during the age of the "Enlightenment" starting in the 17th century. This may not be surprising when considering how the name and rhetoric of the social and philosophical movement employs visual motifs of light, eyes, seeing, and vision in contemplating knowledge and the ideals of human flourishing. The most popularly known debate was "Molyneux's Question" (or "Problem"), which was a thought experiment that sought to elucidate the relationship between visual and tactile forms of knowledge and account for how the senses came together to form understandings of reality. The debate began¹⁴ when the William Molyneux (d.1698) posed the following scenario to the John Locke (d.1704):

If a person who was blind from birth, who had learned to distinguish a cube from a sphere from touch alone, was supposed to have his sight restored to him, would they be able to tell the difference between a cube and a sphere based on the newfound sense of sight?

Would the subject's tactile experiences suffice in recognizing shapes visually for the first time? The scenario gives way to a plethora of questions related to the philosophy of mind, perception, and the senses. What relationship did the visual have with the tactile? Was the relationship between these two senses arbitrary or necessary?

Empirically minded philosophers such as Locke, Berkeley, Voltaire and Condillac generally responded to Molyneux's Question in the negative, opining that a blind man would *not* be able to recognize or distinguish the objects. This view privileged the role of experiential knowledge over that of intuition or reason and suggested that two types of sensory knowledge did not naturally coalesce. Others with a more "rationalist" bent, such as Synge, Lee, and Leibniz, offered opinions in the affirmative, suggesting that the two senses share something

¹⁴ Centuries before Molyneux, the Andalusian polymath Ibn Tufayl (d.1185) offered a curiously similar thought experiment in his book *Hayy ibn Yaqdhan*. How these two are related, and how they diverge in their respective philosophical traditions offers an illuminating comparative framework, as explored by Russell (1994), and Jehama (2020).

essential which could be observed directly, or else inferred and deduced through reason (Marjolein and Lokhorst 2021).¹⁵ Denis Diderot (d.1784) too joined the debate with his essay *Lettre sur les aveugles à l'usage de ceux qui voient* (Letter on the Blind for the Use of Those Who Can See), which drew on methods that went beyond mere philosophical speculation by using empirical methods of actually interviewing blind individuals at length to present a more grounded and sympathetic account of the possibilities of blind experience and education (Tunstall 2011). The debate has been so important that the historical philosopher Ernst Cassirer considered it to be "the central question of eighteenth-century epistemology and psychology." The entry in the Stanford Encyclopedia of Philosophy dedicated to the debate claims that "there is no problem in the history of the philosophy of perception that has provoked more thought than the problem that Molyneux raised in 1688" (Marjolein and Lokhorst 2021).

Molyneux's question is just one of the many examples of how philosophers have approached the concept of blindness. As I began my own research and became more attuned to its expression, I began to see it everywhere. While nearly all philosophers employ the idea of blindness as a symbolic concept, as in Kant's famous statement, "Thoughts without content are empty, intuitions without concepts are blind" (1998, 193-94), the prevailing tendency is to stress imaginary and idealized conceptions of blindness, with little concern for the realities of actual blindness as a "native" perspective. Writers who use the concept of blindness often do so with the recognition that their representations of blindness draw upon symbolic or metaphorical

¹⁵ Despite the experimental framing of Molyneux's hypothetical scenario, the question has resisted attempts to settle it experimentally (Glenney 2013, Ferretti and Glenney 2021). As cataract surgeries began to be practiced in the 18th and 19th centuries, the scenario started being tested, but philosophers and cognitive scientists have called into question the testing circumstances of these cases and debated the logical implications of these experiments, and researchers have continued to offer both affirmative and negative responses to the question. Today, Molyneaux's question remains open-ended, and continues to be reconsidered, tested, analyzed, nuanced, and reformulated, not only by philosophers, but by researchers in fields such as psychology (Gallagher 2005), neuroscience (Held et. al. 2011, Gregory 2003), ophthalmology (Leffler et. al. 2021), and cognitive science (Jacomuzzi, Kobau and Bruno 2003).

understandings. However, these representations still strongly import and project assumptions about actual blind experience.

Moreover, when philosophical approaches explicitly speculate on actual blind experience (as in the case of Molyneux or Merleau-Ponty), they usually imagine an idealized kind of blindness that excludes most blind ways of being.¹⁶ For example, they often presume a kind of blindness or *sightlessness* that is congenital and total, although this type of blindness is rare and constitutes only a small minority of those who identify as blind or visually impaired in society. Total congenital blindness offers an ideal construct because such a blind person is understood to have no experience or memories of the visual world. Such a blind person allows philosophers to frame a conception of blindness as the antithesis of sight. This absolute view is articulated by American historian and art critic James Elkins: "[S]ight and blindness are like white and black or on and off: they are opposites, and when sight is working, blindness is not present" (1997, 202).

The experience of this idealized blind person who never saw is valued as a theoretical point-of-view capable of isolating sight and visuality from the range of multi-sensory experience, and thus provided a way to think about the relationship between different modes of sensation. It also frames an idealized perspective to consider the role of experiential knowledge, and its relationship to knowledge that is innate, intuitive, or reasoned.

Not only do these philosophical approaches tend to limit themselves to a particular idealized kind of blindness, but they also rely on speculative imaginations of such an experience that suffer from crippling ableist biases (Kleege 2018; Paterson 2016). Joel Reynolds for example, argues that Merleau-Ponty's interpretation (2002, 14) of the blind man's cane (*le bâton*

¹⁶ Georgina Kleege calls this imaginary figure as, "The Hypothetical Blind Man," of western philosophy and critiques a number of biases that such a figure embodies (Kleege 2005; 2018, 14-29). Adding to this concept, I suggest that the Hypothetical Blind Man in turn constructs a Hypothetical Sighted Man in dialogical opposition. While the Hypothetical Blind Man is bereft of visual sensitivity, the Hypothetical Sighted Man is constructed as a subject whose vision is absolute and perfect, and devoid of blindness.

de l'aveugle) "is problematic insofar as it omits the social dimensions of disabled experiences, [and] misconstrues the radicality of blindness as a worldcreating disability" (2017, 421).

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Blindness among the Ummar in Dali Gimba is congenital. Their condition is not one of "total blindness" (or what is classified in Western medicine as "no light perception" blindness), as most Ummārīs retain some residual vision with limited "usability."¹⁷ This is discussed in more detail in Chapter Five. Due of these circumstances, Ummārī blindness in part resembles and in part deviates from the idealized blind alterity found in philosophical discourse. The Ummar provide a fitting, real life example of blindness to think through age-old questions about sensation and perception, and they offer a way to correct the assumptions of ableist philosophers, with their idealized and allegorical representations of absolute blindness. In addition, face-to-face interactions with the Ummār also create reflexive conditions that challenge notions of the Hypothetical Sighted Man, of whom I am an inexact approximation.

Medical Approaches to Blindness

Beth Omansky writes that:

Research on blind people has been dominated by literature written from the perspectives of medicine, rehabilitation and psychology, focusing on disease and its effects, psychological aspects of blindness (grief and loss), adaptation and coping strategies, and employment. Blindness is positioned absolutely on the individual, as if it occurs in a social vacuum. (2004, 128)

¹⁷ The term "usable" vision is often deployed in healthcare settings to qualify the degree of one's visual impairment in terms of how functional their vision is in activities such as reading, writing, recognizing objects and faces, and navigating the environment. The degree of usable vision someone has determines what adaptations are possible. Community activists with differential politics regarding disability advocate for distinct strategies for employing usable vision. In the United States, there are two major national organizations that serve the blind and visually impaired, the National Federation of the Blind (NFB) and the American Council of the Blind (ACB). The NFB advocates for an embrace of blindness and takes a confrontational approach to challenge the dominant culture of ableism that imposes social exclusion on blind people. As such, they encourage people facing the loss of vision to identify as blind, and transition to technologies for the blind such as Braille and discourage the use of residual vision for its blind members. The ACB, on the other hand, advocates for visually impaired people generally, and supports adaptive technologies that rely upon residual vision of its members, such as using large print text. I thank my friend Mahmud Rizvi, a blind activist and Harvard law student for sharing this and other critical observations.

Biomedical approaches to blindness begin with the premise that blindness is an impairment, or an abnormal and pathological state of individual bodies, caused by a range of etiologies. It is important to note that perhaps more than any of the countless diseases, conditions, syndromes, or abnormalities that biomedicine directs its gaze upon, blindness serves as an exemplary object of the biomedical approach. Blindness, and the prospect of curing it has played a foundational role in the philosophical and scientific development of modern biomedicine and its role in the project of modernity. In *The Birth of the Clinic*, Foucault asserts that the project of "restoring the blind man to sight" and "the foreign spectator in an unknown country" were "the two great mythical experiences upon which the philosophy of the eighteenth century was founded upon" (1973, 64-65).¹⁸

Public and global health discourses on blindness that draw upon the biomedical approach essentially characterize it as a great loss. The World Health Organization's "Fact Sheet on Blindness" begins with the statement, "[t]he loss of eyesight is one of the most serious misfortunes that can befall a person" (1997). Moreover, blindness is often addressed as a major economic problem experienced at the scale of nation-states. As Omansky notes that public policy regarding blindness approaches it through the lens of cost-benefit analysis, where "[s]tatistics about the cost of blindness prevention, treatment, and rehabilitation are analyzed in comparison with productivity levels to determine if governments are making good capital investments" (2011, 46). This is especially true in the global South, where most of the world's blind population resides, and where its prevalence is largely the result of "preventable" or "treatable," causes such as onchocerciasis (river blindness) and trachoma.

¹⁸ The image of healing blindness also plays an important role in self-representations of religion, especially in Christianity and the figure of Jesus, who is revered as a healer of blindness, both physically and spiritually (Kok 2012).

This attitude towards blindness is also prominent in the field of ophthalmology. As a biomedical sub-specialty, ophthalmology is defined and motivated by the eradication of its associated pathology. As one of my blind activist friends from the United States astutely put it, "Ophthalmology sees blindness as a failure of itself."¹⁹ In the United States, the National Federation for the Blind (NFB) has issued statements to urge ophthalmologists to discontinue language that conveys the sense of "helplessness, isolation, or despair," when communicating with patients faced with blindness, and has implored the field to pay more attention to the general health needs of blind people, rather than solely being dedicated to the treatment, eradication, or prevention of blindness (NFB n.d.). In considering how ophthalmologists determine that a patient to be destined for blindness, and then subsequently refer them out for rehabilitation, Rod Michalko notes that,

Ophthalmology is recommending *agency* as an *actor* presented as qualified to speak about, and act upon, permanent blindness. This suggests that blindness requires agency and needs to be acted upon in order for it to be lived with. Rehabilitation, too, conceives of the seeing life as the only good life. (1998, 66- 67)

In my own experience, ophthalmologists have had some of the most acerbic reactions to hearing about my ethnographic work in Dali Gimba. Although most people in the United States or the "Arab" world that I would meet would react to me recounting my ethnographic work with wonder, amazement, or pity, I can never forget how one ophthalmologist from Washington, DC reacted to hearing about Dali Gimba with physical agitation and rage. He cut me off and refused to hear another word about the village. Stomping his feet, he told me that hearing about the village physically roused his body. He should out, "I *hate* blindness!"—and repeated it two more times for emphasis. He handed me his business card, and insisted I take him next time I

¹⁹ (Mahmud Rizvi, Phone Call, 2023)

was to return to Dali Gimba, vowing to personally fund and organize a medical mission to "terminate" blindness in the village once and for all.

Biomedical approaches to blindness are an important object of study in this ethnographic work because in Dali Gimba, biomedical approaches to blindness and related fields of global health and economics have come into conflict with local self-understandings of blindness, especially in the aftermath of a genomic research study on the village carried out in 2017, and the subsequent media campaign to challenge local understandings of blindness and pressure villagers to submit to surgical rehabilitation. Ummārī blindness also challenges the medical model of blindness in a unique and fundamental way: it not only rejects the starting premise that blindness is a loss, but inverses it, by interpreting blindness as a sign and source of divine grace, honor, and miracle. This is discussed in more detail in Chapter Three.

Social Approach to Blindness

Since the 1970s, social scientists and disability activists have sought to redefine the understanding of blindness through use of the social model of disability. This approach seeks to challenge the medical model which sees blindness as an *impairment* stemming from the physical reality of individual bodies by instead viewing blindness as a *disability* that is socially constructed. As such, this approach does not presume that blindness is just the name of an (un)naturally occurring condition that constrains agency by its own virtue. Rather, it considers how blindness emerges as a disability in society and focuses on how ideological constructs and built infrastructures constrain agency and *disable* people. Based on a structuralist model, this approach conceives of disabilities as relational categories that are arbitrarily appended to a range of oppressive and misguided associations under dominant ableist politics.

Scholars proffering the social approach to blindness have argued that conventional (medical and philosophical) approaches have less to do with any objective or embodied reality of blindness and are more reflective of the perceptions and prejudices of able-bodied publics (Cervinkova 1996:26). As such, these critical scholars have sought to reframe the meaning of blindness through a variety of methods and study it in social, environmental, and historical contexts. They analyze symbolic representations of blindness in public discourses such as literature, histories, religious texts, folktales, songs, or visual art, and critique the ideological structures that construct the meaning of blindness and blind identities in society. They identify structural elements of society, such as language or policy, which reveal how dominant ideologies privilege able-bodied individuals (ableism) or disadvantage disabled people (disableism).

Robert Scott was one of the first to apply the social model of disability to blindness. His attention to the socialization process is summarized by the famous pithy statement found in his book *The Making of Blind Men*: "Blind men are not born, they are made" (1969, 121). Blindness has been a common theme of study by anthropologists in Israel. Following in the early tradition of Robert Scott, Shlomo Desen was one of the principal researchers who promulgated the disability approach to anthropology. Deshen's study was based on research with blind and "sightless" Israelis in Tel-Aviv that he befriended and interviewed over years about topics such as everyday uses of the senses, accommodative technologies such as guide dogs and canes, and issues related to employment, inclusion, and accessibility in Israeli society (1990). Israeli researcher Gili Hammer continues in this tradition, in *Blindness Through the Looking* Glass, which presents an ethnographic monograph on blind women in Israel that explores and challenges the role of sight, visuality, and other senses in the construction of gender and

femininity.²⁰ Hammer's work is especially instructive in demonstrating the potential of an ethnography of blindness that considers both the symbolism of blindness *and* the daily experiences of blind (and sighted) people. These investigations of blindness do not extend to consider the experiences of blindness among Arab Israelis and Palestinians living under occupation, where Israeli state biopolitics of disability enable the mass debilitation of Palestinian bodies (Puar 2017).

It is impossible to write an anthropological monograph about a "blind" village space without paying homage to John Gwaltney (d.1998).²¹ Gwaltney was a student of Margaret Mead, one of the first black anthropologists in the United States, and the first who was blind. He is most often remembered for his work *Drylongso: A Self-Portrait of Black America* (1980), which was a pioneering work in the study of Black core culture, "native" anthropology, and oral historical research methodology (Cole 1999). Prior to this, Gwaltney published, *Thrice Shy: Cultural Accommodation to Blindness and Other Disasters in a Mexican Community* (1970), which was a rich ethnographic account of San Pedro Yolox, a village in Oaxaca, Mexico with an unusually high prevalence of blindness."

The present study shares a strong kinship with Gwaltney's study in terms of field context. For example, like Dali Gimba, San Pedro Lolox was a place constituted by an exceptional blind microculture—where blindness was not "dramatically immersed" in a world of sightedness. In this space, Gwaltney reported a high degree of "cultural accommodation" on the part of the blind, and awareness and acceptance of blindness on the part of the sighted. Both Dali Gimba

²⁰ Elizabeth Davis similarly uses a critical disability approach to blindness to unsettle the normative sensory subject and critique visuality and visual culture (2019).

²¹ I thank the Hon. Judge Theodore McKee for putting Gwaltney on my radar. It is surprising how Gwaltney's legacy remains unknown and minimized to many anthropologists.

and San Pedro Lolox consider "remote" and pastoral contexts of blindness, in contrast to most social studies of blindness, which focus on blindness in metropolitan and urban environments. One important way in which these studies differ is that while blindness in San Pedro Lolox was the result of an infectious disease, blindness in Dali Gimba is caused by an inherited genetic condition. Gwaltney dedicated much of his work highlighting the pernicious social structures of violence, failed infrastructure, and poor sanitation that created the material conditions of blindness in his field site.

Writing against the common framing of sightedness and blindness as a binary opposition, Beth Omansky considers the position of the "legally blind" as a "borderland identity" that exists in the undetermined and liminal space that blurs the boundaries between the two categories (2011). Omansky employs reflexive approaches to explore the overlap between sightedness and blindness that conventional designation of these identities obscure.

Revising Disability

This project has benefitted from the social approach. The case of blindness in Dali Gimba powerfully highlights the importance of the social context and history in the construction of blindness because it shows an alternative social reality where blindness is understood, situated, framed, and experienced differently than dominant representations of it elsewhere. I share the social approach's agenda to deconstruct the category of blindness by seriously considering things such as local cultural contexts, histories, symbolic associations of blindness, representations of blindness in media, social roles for the blind, design of built environment, local sensory

ideologies, cultures of ableism.²² However, this study diverges from typical social studies of blindness that approach it as a disability within a particular realm of politics.

Proponents of the social approach to disability have drawn attention to the various ways that blind difference is socially constructed, to challenge universal definitions of blindness as a physical reality. However, the social model has largely been deployed within the domain of a particular kind of disability politics that is concerned with socialization processes insofar as they generate social and material conditions that are dis-abling and disempowering to certain bodies and minds (Ginsburg and Rapp 2013, 54). Deshen articulates this sentiment when he offers a definition for his socio-anthropological approach to disability as, "the study of people who differ from most humans by having exceptional bodies, and whose culture usually disempowers them" (1990, 5). So, where medical approaches locate the source of impairment and disability in the natural conditions of the individual body, social construction approaches instead locate disablement in social conditions, historical contingencies. Infrastructures, or ideologies.

Anthropologists of disability have worked to enhance the theoretical frameworks beyond the social model by bringing in the social, experiential, narrative, and phenomenological dimensions of living with particular impairments, and employing methods that privilege informant voices and a participatory approach, while still remaining attentive to activist politics (Ginsburg and Rapp 2013, Shuttleworth & Kasnitz 2004, Groce 2001, Shakespeare 2005). Anthropologists of disability have largely focused on how legal, political, social structures, and ideologies of disability may "stigmatize and constrain people with impairments," or they have examined how "disabled people have agency to resist oppressive structures and creatively use

²² I use the term "cultures of ableism" instead of invoking the usual concept of "dominant ableist culture" to draw attention to how different societies may offer different dominant models of the normative body, an in turn imagine disabled people in different ways.

disability discourses and structures to their benefit" (Bloom 2020, 279). This focus is perhaps due to a tendency in anthropology and other social sciences since the early 1980s to assume a close connection between a critical symbolic conception of culture and forms of power and domination that are reproduced in actors' everyday practices (Ortner 1984; Giddens 1979, 1984; Bourdieu 1977). As Kasnitz and Shuttleworth comment, "[i]n this conception, culture is viewed as inhibiting and restrictive rather than simply enabling" (2001, 2). For example, Robert Murphy, a pioneer in the use of reflexivity in anthropological research on disability, offers an analysis (2001) of how "American cultural norms that valorize independence serve to dis-able identity, status, and social relations, revealing the cultural and existential dynamics of marginalization" (Ginsburg and Rapp 2013, 56). Likewise, Molly Bloom writes that, "much of the literature on disability in the Middle East and North Africa, and the Arab-majority World find that disability, which is more likely to impact women, represents a 'double burden' for disabled women, as women already experience a heightened degree of oppression" (2020, 277).

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For the Ummār, conditions of blindness and sightedness are constructed through broader notions of kinship. Blindness is constituted by a radically different epistemology where it is seen as a *karāma*, a gift from God, and source of strength, opportunity for struggle and expansion, a means for "compensatory" and extraordinary sensory attunements that provide access to differential sensory worlds, seen, invisible, and unseen. For Ummarīs, blindness is not just an external socially imposed category of difference placed on them but is a crucial aspect of their personhood, blood, and genealogical identity. In approaching the Ummār, my focus shifts to how blind and local "cultures" *enable* modes of action. What can social constructionists and disability scholars say about a community of blind people who affirm the possibility of blindness as a compensation, or advantageous attunement? Or as a gift from God? Social approaches to disability have generally lacked the capacity to accommodate this configuration of blindness. Moreover, I have found that such a stance is highly policed, and to suggest otherwise strikes a sensitive chord with many who champion the social model.

Disability scholars have critiqued any stereotypes and symbolic associations with disabilities and disabled people. Not only do they reject "negative" narratives, but also "positive" ones. For example, Kenneth Jernigan, the former president of the U.S. National Federation of the Blind, challenges popular images in English literary culture that construe blindness as a total tragedy, foolishness and helplessness, unrelieved wickedness and evil, punishment for sin, abnormality or dehumanization. Just as well, he challenges images of blindness as compensatory or miraculous power, perfect virtue, purification, or as a symbol or parable (Jernigan 1974). He argues that these positive stereotypes are harmful because they do not "lessen the stereotype of the blind person as alien and different, unnatural and peculiar. It makes it worse" (Ibid.). He dismisses the allegory of blindness as compensation as a "stereotyped stupidity" that no blind person in the audience would buy and asserts that "there is no 'fourth dimension' to blindness—no miraculous new powers awakening, no strange new perceptions, no brave new worlds to explore" (Ibid.).

Disability scholars also challenge "positive" stereotypes under the guise of what are called "supercrip" narratives, which are defined by Silva and Howe "as a stereotype narrative displaying the plot of someone who has 'to fight against his/her impairment' in order to overcome it and achieve unlikely 'success'" (2012, 178). Supercrips are viewed as heroes either because of their great achievements or just for simply "living a normal life in spite of their disability" (Clogston 1991, 170). Although such narratives are often deployed with the overt

intention to oppose the extreme negativity associated with disability by replacing it with an extreme positivity, critics argue that supercripization works to reinforce disability as "otherness" and, in turn, this reinforces the understanding of impairment or disability as a negative human deviance (Silva and Howe 2012). Disability scholar Alison Kafer argues that such narratives reinforce ableism because they emphasize independence, reliance on one's body, and the role of the individual's will in self-cure (Kafer 2013). Furthermore, supercrip narratives are challenged especially because they are picked up in ableist media worlds that reproduce ableist politics built upon an individual, medical, and a natural model of disability, and thus seen to stifle the possibility of social and ideological change.

As such, disability scholars tend to dismiss any representations of blindness that draw upon these symbolic dimensions of blindness. When disabled people espouse these kinds of ideas, disability studies have little to say, except for maybe dismissing it as a kind of false consciousness. Part of the reason these narratives of blindness are excluded from disability studies approaches is the ethnocentrism that results from focusing studies almost entirely on disability in Western contexts. Such disavowals, for example, are at odds with local understandings of blindness by blind Ummārīs and others in Islamic, Arabic-speaking, and Saharan worlds. In the Arab world, blind people are sometimes referred to as *basīr*, which literally means "seer."

To the Ummār, ideas about miracle are not unthinkable, but actually essential to the understanding of blindness. For them, blindness is essential to their social and genealogical identity, as well as their connection to God. Although they nuance understandings of compensation beyond the idea of equivalence or direct causation as detailed in Chapter Two, they view their blindness as an important means to acquiring extraordinary sensory attunements

that provide access to new sensory worlds. While they may overtly resemble supercrips, they diverge from them in some important ways. For example, whereas supercrip narratives imagine the heroism of a disabled person as an overcoming of their disability, for the Ummār, success lies in leaning into their blindness, in all its limitations, differences, and potentialities. Additionally, while supercrips are thought to earn success through individual efforts, for the Ummār their exceptional success comes primarily through an exclusive divine grace from God. While disability scholars criticize supercrip narratives because they stimulate an emotional response from able-bodied viewers that reaffirms their "normal" condition, when encountering extraordinary forms of difference among the Ummar, I was instead left with a newfound appreciation of the partiality of my own perceptive condition.

Critical Blindness Studies

This study also draws upon and engages with other more recent works on blindness that employ the social model in different ways. Karis Jade Petty conducts ethnographic work on blindness using a phenomenological approach that considers the "sensorial emplacement" of blind and sighted individuals. Her study argues for expanding the concept of "seeing" beyond the eyes and the realm of the senses "to capture the ambiguities and paradoxes of seeing in blindness" (Petty 2021, 2). Petty's work is instrumental in showing how sensory experiences and modes of perception (and experiences of sightedness and blindness) are dependent on changing environmental conditions and affordances. In another article, Petty studies blind experiences with the uncanny in the woodland landscapes of Southern England to reconsider the role of visuality and the invisible in the perception of the environment (2020).

In *Blinding Sight: Seeing Race Through the Eyes of the Blind* (2013), Osagie Obasogie solicits blind people's understanding of race to explore the role of visuality in the construction of

race, and to challenge the idea of "colorblindness" that prevails in popular racial ideologies and United States constitutional law. Obasogie's work shows how folk understandings about sight and blindness are crucial to the construction of racial, ethnic, and other social differences.

Autobiographical, reflective, memoir, and expressive works authored by blind writers, such as Taha Husayn (1971-73), Stephen Kuusisto (1998, 2006), John Hull, and Jacques Lusseyran, and blind theorists such as Rod Michalko (1998, 2002, 2023) and Georgina Kleege (1999, 2018) show how "insider" perspectives on blindness provide insightful reflections into the phenomenological blind experiences as well as critical theorizations about blindness and sight.

Inspired by Michalko's call, I write against the popular view of blindness as a "lack" and instead invite blindness to be a "teacher" (1998, 3) of insight that can unlock the mysteries beheld in sight and the human condition. In his book, Michalko encourages us to "embrace blindness as an occasion to think about our life, our choices, our decisions, how we choose to understand each other, and the ways in which we choose to live collectively in the human community" (1998, 4). In this spirit, this project seeks to recover the hidden abundance that lies within blindness and consider more broadly why blindness creates such a deep and meaningful domain of experience in critical studies.

Disability Across Cultures

Although disability studies have blossomed since the 1970s and many studies have richly explored the social construction of disability, most of these studies have been limited to metropolitan, urban, and secular contexts, especially from the global North. In her call to decolonize disability studies, Helen Meekosha claims that the "dominance of the global North in the universalising and totalising tendencies of writings about disability has resulted in the marginalisation of these experiences in the global South" (2011, 667). Examining blindness in

these Saharan, Islamic, Arabic-speaking contexts brings much needed non-Western insights into studies of disability which continue to be dominated by Western and metropolitan perspectives.

Ingstad and Whyte note that the category of "disability" itself is a questionable frame of analysis because, "[i]n many cultures, one cannot be 'disabled' for the simple reason that 'disability' as a recognized category does not exist" (Ingstad & Whyte 1995, 7). In the medieval Islamic world, for example, Kristina Richardson has argued that in Medieval Arabic literature certain bodily differences were understood as "blights" ('*ahat*) of the body, which she argues was a term that did not connote the same sense of social exclusion as do the concepts of "disability" or "impairment" (2014). Sara Scalenghe writes that "there is sufficient evidence to suggest that this Ottoman, Arab, Muslim-majority society [during 1500-1800 A.D.] tended to include rather than exclude, victimize, or stigmatize impaired and non-normative bodies" (2019, 110). Muhammed Ghaly suggests that such an inclusion was the result of Islamic theology's rejection of the Christian doctrine of original sin and the idea that disabilities are retribution for the sins of one's father (2010).

Nili Kaplan-Myrth suggests that the universal application of disability prevention models implemented by international organizations like the World Health Organization (WHO) have failed because they do not account for local contexts of blindness in places such as the so-called "Third World," where blindness is experienced as one of several disabling conditions of everyday life. In her case study, she finds that blind people face several primary issues like hunger, poverty, maternity, work, and witchcraft, and the singularity of blindness as a totalizing disability is not as pronounced there as it is in WHO definitions (Kaplan-Myrth 2001). Kaplan-Myrth's work joins others that reiterate the need for social studies on disability to consider the political economy of health and the considerable production of impairment and debilitating

conditions of structural violence that shape the social life of disability and human rights in the global South (Farmer 1996, 2004a, 2004b; Gharaibeh 2009; Grech 2015; Puar 2017).

Other researchers have identified how the experience of what might be called "disabilities" in Western societies is drastically altered by differential models of personhood. For example, Mac Marshall contends that a distinct "group-oriented" view of the person in Polynesian and Micronesian societies results in vastly different attitudes towards physical impairments than in Western societies where personhood is defined through the concept of the autonomous self and notions of individualism are idealized. Based on ethnographic research conducted in this region, Marshall argues that "social isolation" is the salient measure of how disabling any impairment is, and that on these island communities, "even serious physical impairment (e.g., paraplegia or blindness) does not necessarily constitute a disability, because impaired people have usually been able to construct new roles in society that allow for them to continue making active contributions to households and community life" (Marshall 250).

Disability studies deploy disability as a general and widely inclusive grouping and prefers to elide differences between disabled experiences for the sake of bringing people together, encouraging solidarity, promoting acceptance, and organizing against ableism as a total system. Kleege notes that the National Federation of the Blind, the foremost organization for the blind in the U.S., "has long held that calibrating distinctions between the totally, congenitally blind, the adventitiously blind, the visually impaired, the partially sighted and so forth, actually dilutes the political impact of a group of admittedly diverse individuals who nevertheless have common social, educational, and vocational goals" (2018, 4).

In contrast to this impetus to assimilate all blind people together or foster solidarity with people with all kinds of disabilities, the Ummār consider their own blindness as distinct and

unrelated to other groups of blind people. Disability (*i'aqa*) is not a relevant category in Dali Gimba, and blind Ummārīs do not typically identify with this category. Moreover, Ummārīs have not participated in Mauritania's growing disability activist communities, even after 2012 when the country ratified the United Nation's Convention on the Rights of Persons with Disabilities (CRPD). When I visited Nouakchott, I occasionally visited the office of the L'Association nationale des aveugles de Mauritanie (ANAM), the national association for the blind, and met with its president, Mohamed Salem Ould Bouh, a well-known figure in the world of Mauritanian disability politics. He knew of Muhammad Mahmud and the village of Dali Gimba and regularly asked me to invite members of the village to upcoming events, or to just come in to talk. However, when I extended the invitation to Muhammad Mahmud, he would always decline. Once, I pressed him further, asking what harm there could be in talking with the man, to which he replied, "what would we even talk about?—What could we possibly have in common?"

The Ummārīs were uninterested in movements promoting the value of "inclusion" (*damāj*) and political action to secure the rights of blind and disabled people to participate in the broader public sphere. Their refusal to participate in the ANAM organization did not stem from disagreement with its agenda, but simply from the lack of identifying with its base and falling short of finding common political solidarity. I found it peculiar how they showed concern for the plight of the blind in society in the way sighted people would—as a difficult circumstance occurring to *others*, rather than as a shared experience. Muhammad Mahmud and other Ummārīs would express remorse and pity over the difficulties that the blind in society faced and wished them the best in their activist efforts.

Even though the immaterial, arbitrary, and relational category of disability provides a platform of commonality and solidarity across various disabilities, the generality of the category elides the fundamental specificities of particular forms of disability, and salient differences within any single "disability." For example, blindness bears a specific relationship to sight, sightedness, visual culture, and mediates a particular material and social arrangement. The disability category elides the specificities of any one group of blind people or type of blindness, and it essentializes a particular type of politics. This study draws upon particular Ummārī conceptions of blindness to explore the possibilities contained within blindness, as a concept, a frame of experience, and a social identity. It considers how the material circumstances of blindness afford alternative patterns of social engagement and knowing in the world, and how blindness can actually become a means of acquiring social capital and enabling forms of action, rather than just being a source of disability.

Anthropology of the Senses

The anthropology of the senses and other sub-fields of sensory studies are particularly relevant to the theory and method of this research project. The senses have been a longstanding but spotty area of interest in anthropology and social theory. Franz Boas pioneered the field of American anthropology with a serious attention to practices of seeing (1901) and hearing (1889), with his students following in suit with studies of "sensing patterns" (Mead and Métraux 2000, 1970). Earlier, Karl Marx commented on the historical underpinnings of sensory formations, writing that "the forming of the five senses is a labor of the entire history of the world down to the present" (1988[1844], 109).

Since the 1990s, a more dedicated focus on the senses emerged among anthropologists. Although the senses are often conceived of as natural capacities of the human, these scholars

have shown how the senses are mediated by environmental, social, historical, cultural, political, and economic forces (Classen 1997, 2005; Howes 2003; Classen et. al. 1994; Stoller 1989, 1997). Researchers in this field of study have shown how human sensory practices are not only shaped by biological and innate foundations, but how they are also crucial products of socialization and learned behaviors, and that different cultures conceive, categorize, and order the senses in different ways. Early insights from sensory studies drew attention to the ways that individual perceptive capacities are intensely regimented by socialization and regimes of entrainment. This was prominently identified by Marcel Mauss, who identified sensory practices as an example of his notion of a "body technique," or the patterns of embodied movement that are socially reproduced and historically embedded (1934).

Scholars have shown that the dominant "five-sense" model that divides the sensorium into five discrete modes of sensing (seeing, hearing, smelling, taste, and touch), and the sensory hierarchy that privileges the sense of sight, is a culturally specific formation that has become dominant in the West and elsewhere. Kathryn Geurts has shown that Anlo-Ewe speakers in southeastern Ghana conceive of the sense of balance as a core and fundamental sense that is ethically prioritized and emphasized in symbolic meaning and practice (Geruts 2000). Steven Feld explores how the sense of sound is elevated in forest dwelling Kaluli people of Papua New Guinea, who use song and music as primary forms of expression and communication, and how these forms of expression are deeply intertwined with their cultural and emotional experiences (1982). Different conceptions of sensory order reflect arrangements of social relations. The senses and discourses about them are crucial sites of contestation which are used in advancing normative constructions of the world. The acquisition of particular sensory capacities and how

people communicate sensory experiences, such as that of "taste," are powerful signals of social identity, class, and "distinction" (Bourdieu 1979).

Considering how senses are not only natural capacities of the human, and are also crucially mediated by environmental, social, historical, cultural, political, and economic forces, what do traditions of blind literati or blind water diviners in the Islamic world reflect about the hierarchy and ordering of the senses in these societies? In addition to blindness, the anthropology of the senses (and its related subfields) also informs my approach to divination. Although divination is often characterized as a form of "extra-sensory" perception, my engagements with the Ummar revealed how the senses play a crucial role in divinatory practices.

Methodologically, working with blind interlocutors offers a unique approach to visuality and encourages attention to multi-sensory interactions in a way that is ethnographically grounded. Conducting research with blind interlocutors, for example, taught me to become a better listener. It made me more attuned to the use of non-visual and visual sensory interactions. It made me constantly aware of the subjectivity of my own observations and compelled me to reconsider how other participants might be sensorially engaging with the world we shared. Moreover, the extraordinary sensory attunements of the blind and forms of miraculous perception in aptitudes like divination also compelled me to consider how local participants may be sensorially engaging in *other* worlds, of which I had only partial or indirect access to.

Although many studies that draw upon the anthropology of the senses have historically tended to resist discourse-centered approaches to culture, I follow Porcello et. al.'s invitation to consider domains of language, semiotics, and discourse in the study of the senses as a way to derive important insights regarding the cultural constitution of the sensorium (2010). Inspired by this body of literature, this study of blindness and divination in Dali Gimba pays close attention

to how the senses are understood, how religion and culture influence sensory ideologies, how the senses are ranked and symbolically charged, how sensory abilities differ, how sensory habits are socialized in different ways across intersections of society, how the material and ecological conditions in the Mauritanian hinterland shape the local sensorium, and how sensory experiences are communicated in language. I pay attention to features of sensory culture that exist on the scale of the broader region of the Saharan West, as well as the local exceptional sensory culture of Dali Gimba. This engagement builds on the numerous theoretical and methodological insights carried by the anthropology of the senses and aims to also reveal new problems for the field and offer new ways to nuance its frameworks and expand its horizons.

Seeing of Water

The concept of "seeing water" that is encapsulated in the practice of water divination also provides a powerful analogue that relates to the foundational concerns of American anthropology. The story of the foundation of American anthropology is often expressed in the story of Franz Boas who transitioned from the field of physics to anthropology through his "discovery" of the cultural variations in visual perception through the course of his PhD research at the University of Kiel. As the story goes, Boas originally sought to assess the physical qualities of color and light and the optical properties of water in different places (Rieckhoff 1985). In the process of putting together his thesis on this topic (1881) and through his subsequent fieldwork on Baffin Island, the young intellectual found that the sensory perception of different materials and colors critically depended on environmental, cultural, and linguistic factors that could not be assessed solely through the quantitative and objective methods of physics, and instead required the qualitative aspects of seeing (Stocking 1982, 142). Water was the gateway to Boas's foray into the realm of anthropology and critical thinking about culture, perception, and human diversity. Stefan Helmreich writes that, "Seawater, seen, became a theory machine for the qualitative, relativist cultural epistemology for which Boas became known" (2011, 134). Alexandra Lorini also notes that "Water in its different forms, and the human activities related to it, was at the center of Boas's geoanthropological descriptions of the Northwest Coast" (1998). Thinking with water encourages theorizing that is inflected by its material qualities, such as fluidity, dynamism, movement, change, and continuity.

The pairing of "sight" and "water" reveals important concordances in their symbolic and material structures. One reason for this is due to the physical properties of water that make it sensorially illusive. Like air, translucency is one of water's most apparent qualities, at least theoretically. At times, it is hidden from the senses, in vapor, subterranean aquifers, vast oceans, locked in polar icecaps and glaciers, or hidden "virtually" within commodity forms and exchanges. It also appears where it is not, especially in the heat of the desert, where it often appears in the form of mirage (sar $\bar{a}b$). For example, in a Qur'anic parable of Bilqīs (the "Queen of Shība") water's material qualities that give it an illusory appearance makes it an ideal medium to arrive at faith in Allah's essence.²³ Upon entering the palace of Sulayman, the prophet and king of the Israelites, the queen Bilqīs lifts her clothing up to wade in what appears to be water, but finds it to be glass with the touch of her foot. With this pivotal experience, Bilqīs recognizes her wrongdoing in worshipping the Sun, and "submits with Sulaymān, to Allah, Lord of the worlds" (27:44). Water's illusory sensory qualities and ubiquity in the natural world and in our bodies also contribute to its place as a symbolic domain for the unconscious, unquestioned assumptions that shape our perceptions and experiences.²⁴

²³ Imam Fode Drame offered this commentary on the Qur'anic parable (Personal Communication, 2021).

²⁴ Consider for example the often-quoted parable of David Foster Wallace:

The concordance between seeing and water is also articulated at the linguistic, symbolic, and material levels. In Arabic, the word '*ayn* means both "well" and "eye."²⁵ Eyes and wells are both circular and concentric and have a chasmal depth when peered into. They contain openings that connect manifest external surfaces (*dhāhir*) of corporeal bodies to their hidden (*bațin*) insides. Eyes make us privy to the heart of another, at least to a certain degree. Subterranean strata of the earth are revealed from through the expanse of a well. The heart and the subterranean are physical and imaginary spaces that typically lie beyond the world of the ordinarily sensible. As discussed in Chapter Six, underground aquifers are veiled spaces contained in the "The Unseen World" ('*ālam al-ghayb*), knowledge of which is considered "unknowable," except in limited capacities of divine disclosure.

The eyes are parts of the body that are taken as synecdoche to stand for the total identity of the human. In the Sahara, patterns of life circulate around wells, and wells are titled by place names that serve as metonyms in the geographic landscape. Waters flow through both structures. Healthy eyes and "living" wells must remain wet to function. Eyes too are vulnerable. They can dry out or be blinded by a speck of dust. The eyes water and "well up" when they tear up and cry. The emission of the eyes and wells can be of different qualities that have symbolic relationships with their origins. Tears themselves may be felt as "warm" or "cool" depending on the emotional state in which they are wept, and water that springs forth from boreholes may be "salty" or "sweet" depending on the aquifer from which it is drawn. In the Sahara, finding groundwater and digging wells are seen as processes that "enliven" a drying earth. So too can

There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning, boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?" (2005)

Through this example, Wallace suggests that society will be able to cultivate a more compassionate and empathetic perspective towards others by being conscious and aware of the "water" that surrounds us.

²⁵ In Persian too, the word *chashm* refers to the "eye," and *chashme* refers to a "natural spring."

crying bring life back to a dying heart. Wells are sources of life in desert worlds. At the same time, wells inherently carry a sense of danger and threat. Gravity looms at the borehole and care must be exercised in its presence, especially when drawing water from it, or when looking down into it. The eyes also contain this element of danger in their proximity. The gaze is notorious for its role in defining control and dominance. In Dali Gimba, people are especially cautious of looking or being looked at in a glance of envy or scorn or hatred, or other forms of the Evil Eye (*al- 'ayn*), which is harmful, to both viewer and viewed.

Chapter Two: A Sketch of Conceptual and Physical Geography

The Saharan West

Mauritania—and the greater Saharan region—makes for a unique context for this research project. Despite its considerable territorial size, it curiously evades the awareness of most global citizens. Mauritanians recognize and often joke about this peculiar global ignorance of their country. Mauritanian journalist Mouhamed Lemine El Kettab writes, after the Mauritanian state was established in 1959, "[n]o marking event had ever since attracted the attention of the world to the fledgling state that Mauritania was" (Kettab 2008).²⁶ The present ethnography is intended to be a contribution to the relatively sparce body of ethnography of the country and broader region which are rich of historical and ethnographic insights.

²⁶ Marutiania's minoritized position on the global scale continues to surprise me. Even among the more geographically inclined anthropologists, historians and social scientists, I cannot count the number of times that it has been mistaken for "Mauritius."

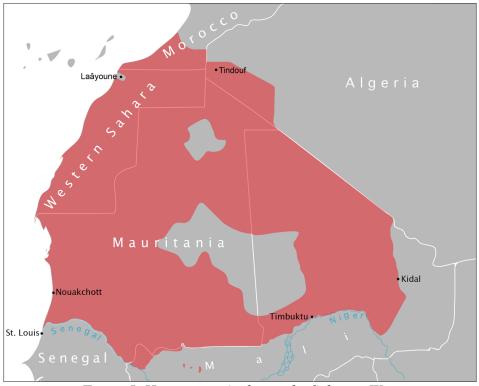


Figure I: Hassaniyya Arabic in the Saharan West Map by Saquib Usman.

I prefer describing Mauritania as belonging to the region of the "Saharan West," termed in this way to avoid confusion with "Western Sahara," which forms a section of this geographic region.²⁷ This region is home to speakers of the Hassaniyya dialect of Arabic, and stretches across the modern-day territories of Mauritania, northern (Azawad) Mali, Western Sahara, and southwest Algeria, where inhabitants call themselves "Sahrawi." Arabic dialectologist Catherine Taine-Cheikh notes that although Hassaniyya-speakers represent a small minority of Arabic speakers in the world, the dialect's linguistic homogeneity over a territory of nearly two million square kilometers is indeed remarkable (2007).²⁸

²⁷ I thank Erin Pettigrew for offering this terminological standard.

²⁸ In Arabic, the region has also been called "al-Takrur," a word that might derive from the name of the Toucouleur people in West Africa. It is often called "al-Shinqīt," which takes the name of the ancient town located in the Adrar as a metonym of the region as a whole. This term gained currency in the 19th century as a proto-national spatial imaginary of a coherent Arab territory (Ould Cheikh 1985; Ould Ahmed Salem 2007, 2021).

The politically and culturally dominant ethnic group in this area are known as the *Bidhān* (earlier called "Moors" in English or "Maures" in French). The ethnonym literally implies the color "white" in Hassaniyya (drawing from the standard Arabic word *baydā*). Often, the term Bidhān is used as an umbrella term for a variety of status groups (Wiley 2018).

It is a socio-ethnic category deployed within a stratified racial hierarchy and an enduring legacy of racialized slavery. It is a name that connotes a sense of Arab or Berber heritage. Its meaning as a racial category accrues from its contradistinction to the Harātīn or Afro-Mauritanians, or [sub-Saharan] "Africans" to the south who are referred to as "black." Social order in the Saharan society remains highly stratified in a hierarchy of ethno-labor classes or castes. At the top of this hierarchy are the *Hassān* and the *Zawāya*. The Hassān have historically served as the warrior elite and exercised political and military dominance and have generally drawn upon an Arab genealogical imagination. The Zawāya claim a Berber heritage and have been associated with scholarly, religious, and economic roles in society. Below these groups are the *Znāga* (tributary groups), the *Muʿallimīn* (craftspeople) and the *Īggāwen* (griots). Finally, at the bottom or the social hierarchy are the *Harātīn* sometimes crudely labeled "black moors," who claim or are attributed descent from formerly enslaved people. The Harātīn speak Hassaniyya and occupy tangential positions within the Saharan West society.²⁹

Additionally, the region is also home to different communities of Black Afro-Mauritanians (*"likwār*," in Hassaniyya), defined as speakers of Wolof, Soninke, Pulaar, and

²⁹ Slavery has historically played an important role in the society of the Saharan West for centuries. Abolition was one of the foremost political issues promoted by colonial authorities in the country, however emancipation efforts did not come with efforts to allow formerly enslaved people to gain socioeconomic independence from slave holders, and thus remained tied to their former masters through social bonds and existing labor arrangements. Several attempts to legally abolish and criminalize slavery since Independence have been made, most recently in 2007 and 2015. International observers such as the UN Special Rapporteur state that, "de facto" slavery continues to exist in the country in the form of racial social hierarchies and discrimination. and others describe how the institution permeates Mauritanian culture and politics (UNHRC 2014; McDougall 2005; Wiley 2018, ould Ahmed Salem 2009; Malluche 2022).

Bambara. French is the de facto working language,³⁰ and serves as the lingua franca for communication across these ethnolinguistic groups. In pockets, there is some survival of the Berber language of Zenaga, and dispersed usage of Tamasheq.

The Saharan West is also a region that roughly corresponds to the geographic range of Muhammad Mahmud's water divination service. The largest proportion of his work took place in his native Hodh region in southeast Mauritania but he also took. calls that brought him southward to the savannah regions in Mali beyond the ordinary bounds of the Saharan West where the water table is shallow, towards the Atlantic coast near the capital Nouakchott, Trarza and the province of Inchiri around Nouadhibou where water is saline, and interior provinces such as Taganat, Adrar, Tiris Zemmour, and locations Western Sahara where the water table is very deep.

Saharan Ecology

Ecologically, Mauritania is part of the Sahara, as well as the "Sahel,"³¹ the southern shore of the Sahara, where the environment transitions from the desert towards the north, to grasslands, savannas, and steppes in the south. Rain falls seasonally (during the *kharīf* summer months), but it is increasingly unreliable and haphazard because of climate change. This environment made nomadic pastoralism based on raising goats, cattle, and camels an apt mode of subsistence in the region for millennia. Far from being isolated, these pastoral nomadic people have lived in a symbiotic relationship with more sedentary populations to the south.

³⁰ In the post-independence era, Mauritania has shifted to a greater emphasis on Arabic as opposed to French as the national language as part of an ongoing trend towards Arabization (Taine-Chaikh 2007).

³¹ Besides its ecological association, the term "Sahel" is also a geopolitical regional term that gains currency within anti-terrorism rhetoric and international state policies highlighting instability in the region.

Deserts like the Sahara are typically characterized as exceptional eco-regions of the world that are defined by conditions of "absence," "lack," or "scarcity" of water and life.³² However, this image of lack is only surface deep. In a previously published article, I explored how the practice of water divination works against this condition of lack by tapping into vertical geographies and by unlocking the hidden abundance of water in subterranean strata of the Saharan environment (Usman 2022). Hydrographers too have shown that the Sahara potentially contains the largest aquifers and groundwater reserves in the world and is thus estimated to be the greatest source of liquid freshwater on earth.³³ Studies of Saharan societies are increasingly relevant in a world where climate change, rising sea levels, melting ice, and crumbling infrastructures have made conditions of water precarity prevalent in a variety of ecological zones (Orlove & Caton 2010). In Dali Gimba, like most other village spaces in Mauritania, water is obtained from wells and circulated through a strenuous labor of acquisition, transportation, and acute localization through containers of various sizes.

The particular ecological conditions of life in a village like Dali Gimba also influence sensory activities in other consequential and material patterns. The intensity of the Saharan sunlight at midday and gales of wind carrying sand (*irifi*) are blinding to the eye. Dali Gimba, like much of the Mauritanian hinterland, is not electrified, and life after sunset is spent in the darkness of night. Artificial lighting and flashlights are avoided at night because they quickly attract swarms of insects, impair the night-vision of others, and lift the natural veil of the night by exposing people who may not be properly covered. These social and cultural conditions all shape the conditions of seeing at nighttime.

³² In an article, I show how this image of lack, is only surface deep, because deserts (of which the Sahara is the largest) contain the greatest aquifers and groundwater reserves in the world.

³³ All surface water (rivers and lakes) in the world is estimated to comprise only 1.3% of the earth's total freshwater. 68.6% of the freshwater is frozen and found in polar ice caps. The remaining 30.1% of freshwater is estimated to reside in groundwater. (Shiklomanov 1993). Of the world's aquifers, the Sahara is thought to contain the greatest (MacDonald et al. 2012, Usman 2023).

Through my research work in Mauritania, I discovered how external perspectives on the Sahara often misrepresent the significance of its unique ecological conditions on patterns of social life in the region. Although I write against structural-functionalist accounts that result in environmental determinism, I still pay attention to the various ways that the Sahara provides specific material conditions that shape life in critical ways, as shown in Chapter Four and Five.

"Edgy" Regionality

One reason that this region has evaded the attention of social research is its "edgy" regionality. Countries that extend across the Saharan West like Mauritania fall between the cracks of major world regions defined by contemporary area studies, which divides the African continent into "North" and "Sub-Saharan" Africa. Earlier, in the 19th century, French colonial regime commonly referred to the territory as "Le Grand Vide" (The Great Void) and approached it as an "administration of the void" (l'administration du vide), but recognized that the region had a strategic position situated in between its domain of colonial activity in West Africa (Afrique-Occidentale Française) from its domain of activity in North Africa (Afrique du Nord Française) on the "Mediterranean face of the Sahara" (Nicolaj 1990, 465). These geographic distinctions are also built upon policies seeking to establish clean distinctions between "the Arab World" and "Black Africa" and, consequently, the distinction between what is claimed to be the "orthodox" (or "orthopractic") Islam of the Arabs and the supposedly "syncretic" "Islam noir" of the Black Africans in French West Africa (Robinson 2004; Ware 2014). Centers of power in North Africa also echoed this sense of spatial "void" ascribed to the southern Sahara. Pre-colonial Arabic sources referred to these hinterland terrains as the lands of, *al-sība* (anarchy), *al-fatra* (legal vacuum), or described it as barzakhi (interstitial) (Ibn Khaldun 2015; Stewart 1976; ould Cheikh 2011).

The Sahara's contested position at the outer boundaries of these other, more dominant regions make it a fecund space for cultural analysis. Anna Tsing notes that margins are important conceptual sites to consider because they indicate "an analytical placement that makes evident both the constraining, oppressive quality of cultural exclusion and the creative potential of rearticulating, enlivening, and rearranging the very social categories that peripheralize a group's existence" (1994: 279).

Although ecological circumstances of the Sahara are often taken to represent Saharan space as a "barrier" between regions, in reality the Sahara is an inter-regional space that has importantly served as a "bridge" (Zartman 1963). Historically, the region hosted the Trans-Saharan trade, which flourished between the 8th and the 17th century, and connected the African continent to the broader global economy (Lydon 2011; McDougall 2005).

Social anthropologist Judith Scheele argues that networks of exchange, mobility, and communication in the Sahara provided a material and social infrastructure that defined the Sahara as its own distinct regional entity. Through multi-sited and transnational research in various Saharan localities, Scheele examines how the historical, ecological, and material conditions of the Sahara lead to a process of spatial constitution where localities emerge through external connectivity, systems of material exchange and trade, interdependence, long-standing kinship connections, and the transmission of Islamic scholarship (Scheele 2012).

Social History of The Saharan West

Despite the Saharan West's "edgy" or "marginal" qualities, the region has an important role in Arabic heritage and the Islamic world. The Sahara shares a deep cultural identification with the Arabian Peninsula and is often imagined as a temporal and spatial extension of it. Both regions are constituted by desert conditions that have supported nomadic pastoralism, Bedouin

life, and systems of segmentary tribalism. As the Sufi leader Ma al-'Aynayn wrote, "[b]y and large it [the Sahara] mostly resembles the Hijāz and the Najd, not only as a country, but also in its livestock and its plants and its crops, to the extent that a traveller in one could imagine himself to be in the other, so marked is the resemblance, and this is even true of the people themselves in their personality, their temperament, and their morals" (Norris 1993, 5-6). Genealogically, a variety of ethnic groups in the region imagine themselves as part of an Arabian diaspora. For example, the dominant ethnic class of warrior *Hassani* people identify as descendants of Banu Ma'qīl, who were said to have migrated from southern Arabia to North Africa in the 11th century; or the Kunta confederation, who are a *Zawaya* group that traces its lineage to 'Uqba ibn Nāfi, a Qurayshi Arab military general from the 7th century; or else as Saharan *Shurafa*, who claim to draw a direct patriline to the Prophet Muhammad himself.³⁴

Of the "Muslim" countries in the world, Mauritania is one of the few whose population is nearly 100% Muslim,³⁵ and has been for centuries. Although Islam has been dominant in the region, it manifests in several forms, and developed in phases over the past millennium. In the 11th century, the Almoravid (*al-murābiţūn*) religious reform movement launched by Sanhaja Berbers spread Sunni Islam built on the Maliki rite and Ash'ari theological school in the region. The trans-Saharan trade gave rise to towns like Wadan, Shinqit, Tishit, and Walata as hubs of commercial trade and networks of exchange between North Africans, Saharans, and West Africans (Krätli and Lydon 2011). By the 13th century, the Banu Hassan began to arrive and assert influence in the southern Sahara, and brought with them the primacy of Arabic, the consolidation of Sufism, and new forms of authority built upon Prophetic lineage. Historical

³⁴ To note, Muhammadan lineage understood as patrilineal comes with the major exception of being mediated entirely through the children of his own daughter, Fatima.

³⁵ Nouakchott has one a church, which attracts a transient community of migrant workers who are Christian.

studies have examined the significance of Shurr Bubba a war in the mid-seventeenth century that is considered the decisive point at which the region's political and ethnic hierarchy and social division of labor were solidified, and scholarly Zawāya tribes conceded political power to warrior Hassani Arabs tribes.³⁶

Networks of exchange and Islamic reformist *jihad* movements also led to the development of the region's own system of advanced Islamic education that took root in two different contexts. First, in trading centers like Timbuktu, Shinqit,, and Tishit, and secondly, within the institution of the nomadic school, or the *mahdhara* (pl. *mahadhir*) (Pettigrew 2019). Saharans described this uniquely local style of schooling as "learning on the backs of camels." In both urban or nomadic settings, the Saharan pedagogy has involved one-on-one teacher-student relationships, close readings and memorization of texts, and the use of the *lawh* wooden writing tablet. This educational model gained a reputation for rigor across the Islamic world that remains to the present day.³⁷

Authority in this space of Islam was decentralized, and Muslims in the region were not inclined to any common political or religious leadership. Historian David Robinson argues that Islamic authority in pre-colonial "Senegalo-Mauritanian zone" was held by various "marabouts,"³⁸ who were "distinguished teachers and writers with significant reputations in the wider region" (2000, 16). These independent authority figures were credentialed in one of two main institutions of Muslim civil society, either Islamic law, or through Sufi orders. Robinson

³⁶ For additional references on the history and social organization of the Saharan West, see ould Cheikh (1985, 1990); Stewart (1972), and Cleaveland (1998).

³⁷ For more on the Mahdhara see Pettigrew (2007); and Lydon (2004).

³⁸ In H.T. Norris's view, the status of the marabout was not necessarily bound to the historical category of the "Almoravid" movement, but rather, suggests a more general type of "saintly [person] outside the limits of everyday human life and experience." He writes, "Such a person is endemic to the Maghrib and Muslim West Africa. The originality of the Saharan saint lies not in the type of character, the mystic vision, the magic powers, or possessed, all these and more are characteristic of other militant or pacific figures who appear in surrounding regions, but in the way that many of them are linked, be it consciously or unconsciously, with the 'beduin' Islam of the murabitun during all periods of Saharan history" (Norris 1968, 115 - 116).

describes that these marabouts "arbitrated disputes, ran schools and initiation practices, received *ziyara*, or visits on special occasions, and organized tours to the home areas of their constituents" (Robinson 16). Religious scholarship and authority have been subjects for historians interested in social structure and political order.³⁹

Sufism

By the 16th century, the influence of Sufism was consolidated in every part of the country, especially through the Qadiriyya and Tijaniyya orders. These genealogies of Saharan Sufi thought and practice were based in "following in the path of al-Junayd, and [was] inspired by the works of al- Ghazali, al-Suhrawardi, al-Sha'rani, and Zarruq" (Norris 1968, 113). In the 19th and 20th centuries prominent Sufi marabouts became important political leaders who sponsored a wide range of approaches, "paths of accommodation," or resistance to the expanding French colonial strategies of pacification and political domination in the region (Robinson 2000). Sufi affiliation was important to the construction of Muslim identity and social organization throughout the region, and in the construction of religious authority (Brenner 2011).

Sufi leaders have also been recognized for their Islamic esoteric knowledge and their work as spiritual mediators who could access unseen and invisible worlds, perform miracles, and resolve social problems. In her book, *Invoking the Invisible in the Sahara*, Erin Pettigrew examines the traditional protective and destructive practice known as *l'hijab*, and seriously considers it as an important object of study in social history to explore how "unseen forces and entities have shaped social structure, religious norms, and political power in West Africa over the nineteenth and twentieth centuries" (Pettigrew 2023). Water divination is another example of the

³⁹ See Charles Stewart (1973), Timothy Cleaveland (2002), and Bruce Hall (2011) for studies that explore the close connection between scholarship, economic activities of scholars, scholarly lineages, and social hierarchy.

"administration of the invisible," whereby a social agent gains access to the invisible spiritual world in order to act upon the visible material world (Pettigrew 2023; Ould Cheikh 1985).

Muhammad Mahmud's role as a water diviner was closely linked to his spiritual adeptness cultivated through advanced training and discipline in the Sufi path. He spent fifteen years of his life living as an acolyte (*tlmidh*) of the Qadri Sufi master Cheikhna Muhammad Mukhtār (d. 1997). Later in his life, the teacher and student teamed up in massive well founding projects in the Hodh region that sought to facilitate the transition from nomadic life and pave the way to the formation of villages across the hinterland region. Muhammad Mahmud used his miraculous gift (*karama*) to find ideal sites for wells, and the Shaykh leveraged his growing charismatic authority and generosity (*karam*) to organize the funding of wells. This process is detailed in Chapter Six.

Considering the importance of wells in desert societies, it is surprising that only tangential research has been done on water divination practices in Islamic, Saharan, and Arabic speaking worlds, or the role of Sufi networks in the development of water infrastructures and well building in the Islamic world. This study seeks an ethnographic approach that examines the everyday life of a practitioner of Islamic esoteric practices, takes the practice seriously to see how it makes sense, and how the practices of the "administration of the invisible" operate in contemporary social worlds.

Blindness in Arabic, Islamic, and African Worlds

How blindness functions as a concept and a motif differs culturally around the world. Likewise, idealized social roles for the blind are based on different symbolic associations and metaphors for the concept of blindness, stereotypes and assumptions regarding blind people, and

ways of imagining the possibilities of blind experiences. In Western civilization, Julia Rodas describes:

The blind man participates in a unique literary history, playing the part of inspiration incarnate: Tiresias, Homer, Milton, Joyce, Borges. Our sense of blindness, our relationship to it, is structured around a universe of blind heroes and villains, poets and seers— Oedipus, the Oracle at Delphi, Samson, Lear, Rochester, Helen Keller, Ray Charles, Stevie Wonder—in a way that can scarcely be compared to any other manifestation of disability. (2009)

However, in Islamic, African, and Arabic-speaking worlds, blindness draws upon a different web of symbolic relationships and calls into the imagination an alternative universe of blind personages. Blindness plays an especially important role in these worlds. In her survey on, "Disability in the Ottoman Arab World, 1500–1800," Sara Schalenghe states that, "Blindness enjoyed the most privileged place in the hierarchy of cultural meanings ascribed to physical impairments in the Arab-Islamic world" (2014, 53). Fedwa Malti-Douglas also states that, "The question of blindness is an important one in Islamic civilization and appears in virtually all of the major types of sources in the medieval period: from the theological and the legal through the historical to the literary and philological." (Malti-Douglas, 1989, 215)

Before coming to this research project on blindness among the Ummar in Dali Gimba, what originally sparked my interest in blind worlds was examining the untold history of blind literati in the Islamic world. Although blind Ummārīs dissociated with other groups of contemporary blind people, they often expressed deeper connections with the genealogy of blind literati in Islamic intellectual history.

History of Blind Literati in the Islamic World

The exceptional presence of blind scholars and mystics can be found across the Islamic world, and blind inclusivity in Islamic intellectual history has been celebrated since the medieval era. They form a distinct blind "literati," men⁴⁰ of letters, who were skilled in aural performance and possessed a depth of mnemonic knowledge, and who contributed through both oral communication and literary transmissions. Fedwa Malti-Douglas, a scholar who wrote extensively on blindness in the Arabic literary tradition, stated that "the principal professions of the blind [historically] were Qur'an reciter, mu'adhdhin, scholar, and poet" (1989, 228). However, attention to the special inclusion of blind students in educational and scholarly settings in the Islamic world is mostly restricted to the footnotes of numerous ethnographic and historical works.⁴¹

One important locus of this social formation of blind literati was at *Jami'a al-Azhar* in Cairo, which is often cited as the oldest university in the world. Since its establishment in the 10th century, the institution crystallized as one of the foremost institutes of Islamic religious scholarship, and it retains an important globally recognized authoritative status in Sunni Islam in the contemporary age.

One unusual aspect of the university's history that is often overlooked is its historical accommodation and inclusion of blind students. In 1715, a wealthy Ottoman officer established a college $(riwaq)^{42}$ at Al-Azhar dedicated to blind education which came to be known as $Z\bar{a}wiyat$ *al-'Umyān* (Dodge 1961, 86). This endowment established a building outside the north-east wall of the mosque's enclosure that consisted of "a classroom with four columns, a prayer niche on the ground floor, three living rooms upstairs, and washing facilities in the basement" (Ibid.). Through the college, blind students and scholars became an integral part of the intellectual community at al-Azhar.

⁴⁰ They are virtually always men highlighted in this literary tradition.

⁴¹ Messick notes in a footnote, that, "Because of the presence of blind students, The Hazr [student residence] in Ibb is sometimes called dar al-makfufin" (Messick 1993, 285).

⁴² Each *riwaq* in the Azhar system housed a shaykh who served as a leader within the university (Dodge 1961).

Based on fieldwork conducted in the 1820s, the British orientalist and Arabic lexicographer Edward Lane enumerated 300 blind students in attendance at al-Azhar, from a total (post-secondary) student population of 1,800 (Lane 1860, 212). Historian Baynard Dodge notes that blind accommodation continued at the university after its modern reformation under the nascent Egyptian republic. He cites a survey taken in the 1950s which recorded 571 blind students enrolled in al-Azhar affiliated satellite secondary institutions, 112 undergraduates, and 52 students in professional and postgraduate courses (Dodge 1961, 165). Although most blind students came from Egypt, some came from the Sudan, Ethiopia, Hijāz, Morocco, and Tunisia to study.

At al-Azhar, most blind students would take the basic three-year introductory course to the Qur'an. Almost always, professional reciters of the Qur'an memorized the Holy Book in its entirety. Having done this makes one a $H\bar{a}fiz$ (literally, "protector") of the Qur'an. In the process of becoming a *Hafiz*, students would also master its proper pronunciation (*tajwīd*) and could go further to study its aesthetic forms and gain training in performing recitation through various melodic forms and scalar pitch classes (*māqāmat*).

This type of Qur'anic education has formed the core of Al-Azhar's educational model. It was not a curriculum made for the blind, but rather a pedagogy that was accessible to the blind.⁴³ Many blind students excelled in the field of Qur'an studies and became professional teachers of the Qur'an. Blind adepts of the Qur'an often joined the "guild of Qur'an readers," who were in great demand for their recitation services in mosques, or to bless feasts, weddings, and other

⁴³ The question remains, however, whether this pedagogy was understood to be universally accessible to blind and sighted, or whether the blind were considered to be at an advantage in this pedagogy. How was blindness accommodated within these Islamic pedagogical institutions? How were blind students integrated at the institution? Was teaching, curriculum, and learning "universally accessible"? What alternative strategies were prescribed and proscribed for blind students? What practices did Islamic educational institutes use to integrate or segregate its blind students? The answers to historical questions about blind education and how pedagogy differed between sighted and blind students at universities such as *Al-Azhar* remain unknown and are important historical questions pending research.

public and private ceremonies (Dodge 1961, 101). Funerary processions were one place where blind reciters were found to be especially prominent (Lane 1860, 514).

Another oratory role that blind men served was as *mu`adhdhins*,⁴⁴ or individuals appointed to perform the *adhān*, call to prayer, at mosques and other locations of ritual prayer at fixed times. Blind students of the Qur'an were ideal candidates to be callers of prayer not only because of their oratory training and skill, but because blindness itself was considered a valuable affordance for mu`adhdhins. For example, in urban settings of the Muslim world like Cairo where the adhān was performed atop minarets which had a vantage on private domestic spaces with open terraces of homes in the pre-modern city (Ibid., 73). In this social context, blind mu`adhdhins maintained the integrity of gendered divisions in public and private spaces, which made them important social actors responsible for timekeeping, and their voices became permanent features of a soundscape.⁴⁵

Besides oratory work, blind literati were also known to produce written contributions, as scholars⁴⁶ or poets. Blind scholars were commonly featured in biographical dictionaries (the genre of *al-Rijal* writings) collected for blind intellectuals of note within a region or an era. One such work is "Nakt al-himyān fī nukat al-'umyān," authored by Khalil al-Safadi (d. 764/1361), which collected 300 biographical notices of noteworthy blind personages that included information about their lives, how they became blind, their educational backgrounds, and their

⁴⁴ The connection between the *adhan* and blindness go back to its origins as a religious practice in the Islam. A blind mu'addhin from Dali Gimba reminded me that prophet Muhammad appointed Abdullah ibn Umm Maktoum, a blind man, to the important post of the mu'adhdhin of Madina. This post is most frequently remembered to have been given to Bilāl ibn Rabāḥ, the Abyssinian freedman and companion of the Prophet.

⁴⁵ The significance of the adhān extends beyond its role as practice of Islamic ritual prayer. Its audition becomes a permanent feature of the sensory environment in a place. The presence of the adhān is a meaningful marker in defining space, and inscribing Islamic identity to a place. The periodicity of the adhān also indicates the passage of time and denotes the position of the Sun in the sky. It punctuates the soundscape of a space, interrupts conversations, and ushers in a new phase of the day for people living within a locality.

⁴⁶ At al-Azhar, Some blind students continued their studies after the initial Qur'anic schooling and undertook a six-year training course to become an instructor, legal clerk, or junior official. Others elected an even longer course to become a judge (*mufti*), professor, or mosque leader (Dodge 1961).

contributions. Works such as these celebrated the inclusion of blind people within Islamic traditions and showed a special attention to blind figures in Islamic historiography.

Many blind personages of the past continue to be known for their writings in the contemporary age. These include 'Abbasid poet Bashshār ibn Burd (d.784 or 785), the philosopher-poet Abū al-'Alā' al-Ma'arrī (d.1057), and the Andalusian lexicographer Ibn Sīda (d. 458/1066). 'Abdallāh b. 'Alawī al-Ḥaddād (d. 1720), who is considered "the most famous Şūfī master and scholar of Ḥaḍramawt and of the 'Alawiyya ṭarīqa," was blind from smallpox that he contracted when he was 4 years old (Alatas 2012). 'Umar b. 'Abd al-Raḥmān al-'Aṭṭās (d.1661), who was al-Haddad's main spiritual teacher was blind as well.⁴⁷ Abū al-Ḥasan al-Shādhilī (d. 1258), the eponymous founder of the Shadhili tariqa, was blind for the last decade of his life from a wound he suffered in the Battle of Mansurah, during the Seventh Crusade. These influential blind scholars draw from divergent intellectual traditions and social movements within Islam's past.

There are also many prominent blind scholars of Islam in the modern age. The most famous blind alum of Al-Azhar is arguably Taha Husayn (d.1973), who became one of Egypt's foremost modernist intellectual writers. He was also Egypt's first Minister of Education (1950-1952) and is known for his writings across the Arab world by his sobriquet, the "Dean of Arabic Literature." Also from Egypt was Abdal-Hamid Kishk (d.1996), who was a blind mega-preacher whose Friday sermons attracted crowds of over 10,000 attendees, and whose cassette-tapes became a permanent feature of the soundscape of public life in Egypt and elsewhere in North Africa (Hirshkind 2006). 'Abd al 'Azīz bin 'Abdullāh bin Bāz, the well-known Wahhabi reformer who served as the Grand Mufti of Saudi Arabia was also famous for his blindness,

⁴⁷ From the 'Alawiyya tariqa, there is also Ahmad b. Hasan b. 'Abd Allah al-Attas (d. 1916) who was another Hadrami scholar and saintly leader known as *al-Başīr*, "the Seer," because of blindness which he acquired in infancy.

which was caused by an infection in his teenage years. Another notorious blind Islamic authority figure who attracted global attention in the recent past was Omar Abdel-Rahman (or "the blind shaykh" as he is known in the West), who was an Azhar-educated Islamist militant indicted for terrorist activity in Egypt and for the 1993 World Trade Center bombings.

Part of the reason for this special prominence of blindness among Islamic intellectuals and Arabic writers was a function of its significant frequency in these Arabic, African, and Islamic societies. Although there is no census or epidemiological data representing the prevalence of blindness in the pre-modern world, historical evidence in the form of travelogues and Arabic medical literature attests to the "sheer pervasiveness of blindness in the society" and suggests that blind individuals were an important "part of the social and cultural landscape of Egypt and the Levant in the early modern period, just as it had been in earlier times" (Scalenghe 2014, 54).

In the Nile Valley specifically, infectious diseases that cause blindness have been significantly prevalent since antiquity (Hare 1967, 128; Sandison 1967, 457). Because blindness was so frequent in ancient Egypt, the Greek poet Hesiod referred to it as "the country of the blind" (Ross 1951, 11). Edward Lane begins his manners and customs description of Egypt in the 19th century with the general observation that "Great numbers of the Egyptians are blind in one or both of the eyes" (Lane 28). After living in Aleppo for several years, the Scottish physician Alexander Russel (d.1768) wrote that eye diseases affected one sixth of the population in the city of Aleppo (Scalenghe 2014). Blindness is most frequently caused by infectious diseases, both in the past and at present, such as trachoma and onchocerciasis, but has also been the result of cataracts, glaucoma, genetic conditions, as well as accidents, injuries, and corporeal punishments.

Blindness continues to have a significant presence in these regions in the contemporary age. According to a systematic review published by the Lancet, there are an estimated 295 million people with moderate to severe vision impairment, of which approximately 43 million are blind (Bourne et al. 2021).⁴⁸ This population is heavily concentrated in southeast Asia and sub-Saharan Africa. The WHO reports that 15.3% of the world's blind population resides in Africa (WHO).

Blindness and Ocularcentrism

One of the most striking things about the guild of blind literati is how their prominence contravenes a dominant logic that conceptualizes "blindness" as having an inverse relationship to sight and the possibility of knowledge. Blind sociologist Rod Michalko summarizes this perspective in *The Mystery of the Eye and the Shadow of Blindness*:

Blindness is often understood as a problem of knowing insofar as knowledge is understood as springing from sense perception. If we possess our senses in natural working order, we possess knowledge. A glance at any current introductory psychology text shows the modern understanding that most of what we know comes through our senses, and it shows that most of that knowing comes through our sense of sight. This conception of knowledge and knowing sets up an obvious connection: the less we see, the less we know. This connection is what the work of rehabilitation begins and ends with. (Michalko 1998, 6-7)

Or, in a similar vein, Georgina Kleege claims that "[a]ccording to this tradition [of ocularcentrism], because I am blind, my knowledge of [visual] art is merely hearsay and secondhand" (2018). The prospect of blind knowledge or blind subjects knowing problematizes the logic of "ocularcentrism," or the philosophical, epistemological, and cultural orientations that privilege visuality above other modes of sensory experiences, ways of knowing, and forms of representation. Critical scholars have rallied against the bias of ocularcentrism in Western

⁴⁸ Using a protocol which defines "moderate to severe vision impairment" as having a visual acuity ranging from <6/18 to 3/60, and blindness was defined as having visual acuity of <3/60 or less than 10° visual field around central fixation.

philosophy that became dominant during the Enlightenment and evident in the epistemological conceptualizations of modern academic disciplines such as sociology, psychology, education, cultural studies, and anthropology (Jay 1993, Macpherson 2005, Mitchell 2002).

Scholars have criticized the "hegemony of vision" that has become embedded in Western culture due to the "association of sight with both scientific rationalism and capitalist display, and the expansion of the visual field by means of technologies of observation and reproduction" (Howes 2003, XII). Critics of ocularcentrism have highlighted the ways that vision has been associated with objectification (Ong 1982; Stoller 1989).

Recognizing this prioritization of seeing and the visual, some critical scholars have called for greater attention to non-visual senses in ethnographic studies and social research (Fabian 1983; Feld 1982; Howes 1991). These sensory domains have largely been left "underrepresented and undertheorized," or dismissed as "picturesque trappings" (Howes 2003, XII) by mainstream social researchers. However, even when studies aim to critique the dominance of sight, they often remain beholden to the realm of the visual in their methodology and focus (Howes 2003, XII).

For this reason, ethnographic studies of "sensory impairments" are theoretically ideal sites for critical analysis because they foreground an "alternative sensory mode" (Howes and Classen 1991) and offer an alternative perspective on the senses. Considering the subject positions of people with sensory impairments in a comparative frame brings into relief how culture ranks the senses hierarchically and how the sensorium is divided in different societies (Keating and Hadder 2010). Specifically, blindness emerges as a privileged position to approach sensory ideologies and the question of ocularcentrism.

Blindness among the Ummar in Mauritania draws upon a long social history in Arabicspeaking, African, and Islamic worlds, where guilds of blind literati served as carriers of knowledge, memorizers of tradition, reciters, orators, callers, teachers, and writers. These and other roles, such as blind diviners and seers, resist the assimilation of knowledge to sight. They problematize ocularcentric conceptions of knowledge and sensory orders that overemphasize the role of seeing and the "visual" in social, cultural, and intellectual life. Their appearance produces ruptures in worlds that depend on the hegemony of the visual.

Some commentators have cited this sensory culture as the fundamental condition that allowed blind literati to flourish in this world. Fedwa Malti-Douglass expressed this sentiment, stating "[t]he main reason for the relatively high proportion of blind men engaged in these professions was the paramount role of orality in the transmission of knowledge." In contrast to the ocularcentrism of Western liberal thought, scholars of Islam have emphasized the crucial role of aurality in Islamic knowledge transmission and Arabic literary traditions. As a foundational text, the "Qur'an" is literally a "recitation" that privileges its aural dimension. It has even been suggested that Islamic societies share an "anti-ocularcentric" or "audio-centric" epistemology, relative to the West, at least in their traditional or pre-modern forms (Mitchell 1988, Messick 1993). However, uncritical generalizations that associate ocularcentrism with the West and antiocularcentrism are reductionist and fail to account for the privileged place of vision in Islam and the Arabic-speaking world.

Islamic culture and art may tend towards the aniconic, anti-figural, and oral, but it also retains a strong emphasis on visual art, in things like calligraphy, architecture or ornamentation, and the literary. And although aurality, memorization, and embodiment are certainly fundamental processes of Qur'anic and Islamic knowledge transmission, visual practices such as

reading, writing, and textuality are also central features of the educational process. Brinkley Messick, for example, explores the centrality of religious jurisprudential writing, texts, and commentaries in various phases of sociopolitical organization and Islamic rule in Yemeni society (1993). This reliance on textuality is especially prominent in regions such as North and West Africa, where the study of the Qur'an and other texts fundamentally relies upon the use of wooden writing tablets (*alwāḥ*; sg. *lawḥ*). Visual activities of reading and writing (and not just aural recitational practices) are critical parts of the standard pedagogy for properly learning and transmitting Qur'anic knowledge (Ware 2014).

In contrast to this standard pedagogy, blind students in Dali Gimba saw themselves drawing upon an earlier pedagogical tradition of Qur'anic and Islamic education through *talqīn al-shafawī*, or "oral delivery," or instruction that they understood to be the original practice of the Prophet Muhammad and his companions and successors in the early generations of Islam, prior to the codification of the Qur'an and other Islamic discourses. Blind interlocutors of Dali Gimba provide a unique perspective through which to examine the relationship between orality and literacy in Islamic tradition, society, and thought. These themes are explored further in Chapter Four and Five.

Written and Oral Cultures

Blindness and cultures of sensation are interesting topics to consider in the Saharan West because it is a location that converges in strong traditions of both written and oral culture. On one hand, textuality, literacy, and writing have central roles in religious education. Saharan history has been described as having a "manuscript culture" (Krätli and Lydon 2011). At the same time, orality, poetry, and memorization have an equally distinct role in Saharan intellectual history.

Memorization, especially memorization of the Qur'an, has an important role in traditions of Islamic education around the world, but Mauritania has a special reputation for its rigorous emphasis of memorization. This is discussed in further detail in Chapter Four.

Although anthropological studies of Mauritania are rare, the discipline is well suited to study the region. Mauritanians, especially those in Dali Gimba, often expressed their appreciation for ethnographic methods, reiterating maxims like, "knowledge comes from the mouths of men" ("*al-*'*ilmu min afwāh al-rijāli*") and not from "books," which could easily be loaded up on donkeys. This stance was even more emphasized among the blind.

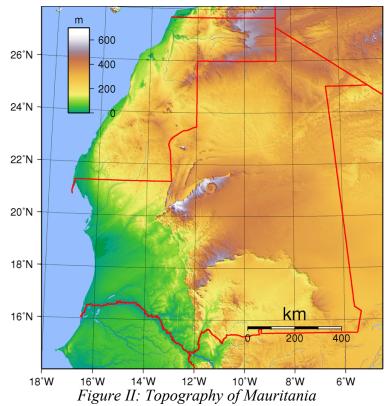
When I asked about important texts, such as al-Khalīl, Malik's Muwaṭṭa, or the Qur'an, which form the core of the Mauritanian intellectual tradition, teachers responded by explaining that the transmission of these texts remains essentially an "oral deliverance" (*talqīn shafawi*). Learning from these books critically depends on immersive, one-on-one, face-to-face, and sensorially engaged contact between teacher and student. These corporeal interactions allow students to absorb the interior state of the teachers and thereby acquire the proper attitude towards knowledge. Despite the centrality of these texts in the Saharan intellectual tradition, physical copies of these books were not easy to find. Often, Qur'an schools do not contain a single printed codex. Moreover, the person who has memorized the Qur'an and the oral rendition of the Qur'an is considered more reliable than printed texts.⁴⁹

The Hodh Subregion

This ethnographic study takes root in the Hodh, which is a region that lies on the eastern periphery of the Saharan West. *Hodh* is an Arabic word that means "basin," which describes the

⁴⁹ See also Ghislaine Lydon's work for commentary on the centrality of orality in the creation and interpretation of historical evidence in the Saharan society (2005; 2009).

topography of the Aoukar depression which gives the region its ecological basis. In modern day Mauritania, the Hodh is divided into two administrative regions (*wilayat*), Hodh ech Chargui and Hodh el Gharbi, and together they are referred as *Hodhayn* (the two Hodhs). In its southern reaches, the region has a Sahelian climate that supports both pastoralism, especially of cattle, and some agricultural production.



*The color gradient represents elevation. Note the presence of the Aoukar depression which shapes the boundaries of the Hodh region in the southeast region of the country.*⁵⁰

Despite the cultural and intellectual importance of the Hodh region, social and historical research on Mauritania rarely focuses on this region. More often research projects focus on more prominent regions such as Trarza and Brakna, or on regions further north, such as the Adrar or Taganat. Research focuses on the Western Sahara, which is the site of transnational conflict and

⁵⁰ Map developed by user "Sadalmelik," published in the Wikimedia Commons public domain (2007).

major issues of self-determination. Or scholars have turned their attention to Nouakchott or other major cities to examine social life in the context of urbanization and political centralization.

The location of the *Hodh* was important during the age of trans-Saharan trade or even earlier, when it gave rise to important historical towns such Koumbi Saleh, Aoudaghost, and Oualata. Many important figures in Saharan history have come from the Hodh, such as Muhammad al-Fādil (d.1869), the founder of the Fādiliyya order, and his sons Sa'ad Būh (d.1917) and Mā' al-'Aynayn (d.1910). However, these individuals left their historical legacies elsewhere in the country. Saad Buh moved to the Trarza and Inchiri. And Ma al-Aynayn established his base towards the north, in Saqiyat al-Hamra, which would later become the Spanish Sahara and then the Western Sahara.

Today, the region remains politically and culturallyimportant and retains a relatively large population for a hinterland province due to its proximity to Mali. It is home to much of Mauritania's Bambara speaking minority. It has also become home to approximately 85,000 refugees (mostly Tamasheq speaking Tuareg people)⁵¹ who have fled civil unrest in Mali and now live in and around the Mbera refugee camp located in Hodh ech Chargui. Since the 1970s, the Hodh has been linked to Nouakchott via the 1,100 km long Trans-Mauritanian Highway.

Muhammad Mahmud himself was born in present-day Mali and resided in the Hodh when it was administratively part of Mali and later Mauritania for his entire life. His life history provides unique insight into the contemporary history of the Hodh and the transition from nomadic pastoralism to village formation, the development of wells, and the role of Sufism in the region.

⁵¹ As of May 2023, the UNHCR registered 85.409 refugees living at the Mberra camp (2023).

Connectivity & The Dynamic Sahara

The Sahara is often seen to be a dying and desiccating part of our planet, one that is becoming increasingly inhospitable. In contrast to this image of stasis, Scheele reminds us that the region is "the fastest changing, most dynamic and wealthiest region of the African continent" (Scheele 7). The Sahara is so often represented as an ecological region that is naturally separated, distinct, and unconnected from the rest of the world. Existing on the margins of dominant world regions, however, does not imply that the Sahara is "marginal" to broader global concerns.⁵²

To borrow what climate researcher Michelle McCrystall said about the Arctic: what happens in the Sahara doesn't stay there.⁵³ Physically, plumes of Saharan dust spread across the entire world and reach through the atmosphere into outer space. This dust, which is rich with iron and other minerals, spreads vital fertilizer across oceanic ecosystems and lands downwind. It travels to the Gulf of Mexico, the southern United States, and the Amazon rainforest, where it replenishes nutrient-poor soil. The earth of the Saharan West, upon which the water diviners of this monograph tread, is present in the atmosphere of readers around the world. The Sahara, like blindness, may be closer than it appears.

⁵² Abu Bakkar, a geologist turned village physician in Dali Gimba shared the interesting observation that The Saharan West bears a primordial contiguity with the Americas as evidence from the corresponding geology in both regions suggest that the two regions were once directly interfacing in the supercontinent of Pangea, prior to the rifting of the Atlantic Ocean nearly 230 million years ago.

⁵³ Reported by Ramirez (2021).

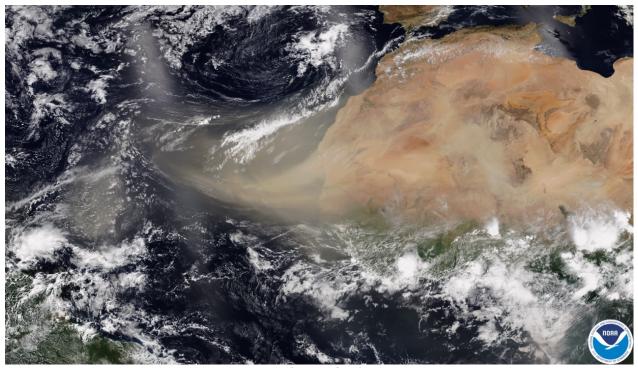


Figure III: Plume of Saharan Dust Strong cross continental Harmattan winds in Africa carry Saharan dust across the world and into outer space. Image taken by the NOAA-20 satellite on June 17, 2020." Credit: National Oceanic and Atmospheric Administration (NOAA)

Anthropology of the "Arab World"

Despite the Saharan West's close kinship with Arabic and Arabian heritage, it has remained on the margins of discourse on the Arab world. It is ironic that Mauritania offers many quintessential elements (such as the salience of nomadism, tribes, orality, seeming "remoteness") of an ideal location for a traditional anthropological study, yet the country has rarely been a host of such studies in anglophone anthropology.⁵⁴

For a long time, the Middle East and the Islamic world were not considered to be appropriate sites for the discipline of anthropology. The discipline had developed in the 19th and 20th century as a field dedicated to studying oral and non-literate cultures. The Middle East and

⁵⁴ Mauritania has however been an area for rich ethnography in French (Bonte 1987, 1990, 2008; ould Cheikh 1985; Lesourd, 2014; Choplin, 2008, 2009; Leservoisier 1994; Boulay 2003, 2013, 2018; Freire 2013; Caratini 1989, 1996; Villasante-de Beauvais 1991, 1997, 2000)

the Islamic world had a strong literary culture that was comparable to European civilization. There was no "discovery" involved in the encounter between the two. Instead, this neighboring social world was left to "orientalist" studies and methods like hermeneutics, history, or archaeology (Shryock 1997; 2019). Given this methodological stance and division of intellectual labor, the anthropology of the Middle East failed to precipitate as a substantial field until well into the 1970s, and with a couple exceptions (i.e., Coon 1965, Evans-Pritchard 1949), anthropological work in the MENA seemed to offer only parochial studies without any broader disciplinary relevance (Fernea and Malarkey 1975).

By 1989, however, the field had blossomed, as Lila Abu-Lughod noted in her review of the field, with major anthropological theorists Clifford Geertz and Pierre Bourdieu, and a number of key figures from the reflexive turn, whose work engaged with MENA societies (1989).

In this initial era of the anthropology of the "Arab World," researchers often selected sites like Northern Yemen and Morocco to study rural, pastoral, and nomadic groups. Abu Lughod argued that such fieldwork sites in remote and extraordinary places were ideal to consider the "zones of theory" that had congealed around the anthropology of the region, namely, tribalism, "segmentation theory," the "harem," the sphere of women's activities, and lastly, Islam. Abu Lughod argued that the focus on tribal sociopolitical organization and these other zones of theory came from the discipline's romantic "proclivity for working simple societies in remote places," and "because Yemen and Morocco are such places, and tribal groups, especially pastoral nomads constitute such simple societies" (1989:285). To redress this selection bias, Abu-Lughod called for the field to redirect its focus from exotic and colorful sites "on the peripheries of the Arab world," toward more "densely populated and well-watered regions that are centers of power" in the Arab world.

Since the time of Abu-Lughod's review, the geographic "prestige zones" and emergent theoretical metonyms of anthropological work in the Middle East and North Africa have shifted radically. In the next major review of the field published in 2012, Lara Deeb and Jessica Winegar outline how studies of "Arab-majority societies" have shifted from focusing on traditionally "remote" sites to metropolitan and urban sites in spaces such as Cairo, Palestine, the Gulf, and Beirut. These sites, they argued, were taken as privileged sites for dispelling the region's image as a tribal, exotic, and isolated place, and challenging stereotypes about Islam and its practitioners proffered by mainstream sources in the context of contemporary geopolitics under the War on Terror.

Along with the shift away from studying traditionally remote areas in MENA, work in the field has largely jettisoned tribal sociopolitical organization and ideology as topics of concern, instead taking up theoretical concerns related to modernity, nationalism, cultural production, and memory. Modernity has become a new central concern and the topics of gender and Islam remain important theoretical metonyms that guide research in the area. Most work, however, privileges engagements with middle and upper-class groups (Deeb and Winegar 2012:538), and with majoritarian ethnic, religious, sectarian identities (Shami and Naguib 2013:29), leaving vast sections of the populations of the region understudied. At the same time, contemporary geopolitical realities in the aftermath of the Arab Spring and the conflicts int he Sahel have made Mauritania an attractive site of research as one of the few remaining sites where they can go.

This research project considers a field site that resembles the older prestige zones of anthropological work on the Arab world. However, it approaches longstanding zones of theory in

new ways. For example, although this study resembles a village study, it seriously considers the global connectivity and modern dynamism that coincide with such a setting.

Additionally, it considers disability (which Deeb and Winegar identify as a lacuna in the field) as a lens through which to examine local models of personhood, kinship, and embodiment in the construction of self and society.⁵⁵ Disability offers a new way to approach enduring themes of kinship, religion, and gender. Local models of blindness in Dali Gimba revolve around notions of descent that may have become unfashionable in the anthropology of the Arab world, but they have an enduring ethnographic value as they are crucial to understanding local of blindness as a genealogically transmitted karāma and the conditions of life on the ground.

Blind Ummārīs do not only occupy a marginalized position by merit of residing in a rural space of a country that has rarely drawn the attention of anthropologists, but also because their blindness mediates a special relationship to orality and illiteracy, which requires a different kind of attention than one that focuses on dominant discussive forms of religious authority.

⁵⁵ See also Christine Sargent (2019) for commentary on how local models of personhood and relationality in the Middle East shape particular understandings of self and society and the experience of disability.

Chapter Three: The Covenant of Idde: Ummārī Blindness as a Sign of *Karāma*

Blindness among the Ummār begins with the story of its origin, the Covenant of Idde. I was told the story in the first hour of my initial arrival in Dali Gimba in 2017 and heard it retold on numerous occasions throughout my time there. The narrative is important not only as a historical account of blindness, but also as a founding "myth"⁵⁶ that affirms the reality of Ummārī blindness as a miraculous *karāma*, or a gift given by Allah to the family, transmitted selectively through blood, that gives rise to a variety of other *karāmāt*. The story gained a renewed relevance especially during the time of my fieldwork, in the wake of a genomic research project conducted in the village and the dissemination of its results which directly challenged local understandings of Ummārī blindness as a karāma. Given this context, villagers in Dali Gimba often beckoned me to assume the role of an authenticator who would write the truth of their story.

I begin by interpreting the "Covenant of Idde" as belonging to an archetype that is best exemplified by the story of the "Annunciation to Maryam," which is the Qur'anic prophecy of the arrival of Jesus revealed to Mary. Through a comparative analysis of these stories, I explore how the Covenant of Idde establishes a prophecy of miracle, a covenant with invisible spirits, and an ethical and spiritual stance of "not grieving." Next, I explore the implications and

⁵⁶ I use the word myth in the anthropologic or folkloric sense, not in general sense of a story that is untrue. For Ummāris, the story is interpreted as a true historical event, and not a fictive allegory.

manifestations of *karāma* among the Ummār that draw together various meanings that are embedded within this polysemous term. I identify four interrelated aspects of the Ummārī karama: One, it is a karāma in the sense that blindness is a miraculous divine intervention in the course of "nature." Two, it is also karāma in the sense that it is interpreted as divine *grace*, a bounteous and privileged gift from God that is embodied and reproduced by its recipients in the form of generosity (*karam*) and hospitality (*ikrām*) in society. Three, alongside blindness, the Ummārī karāma manifests as charisma—a magnetic charming quality of divine origin and source of social authority, capital, honor, and privilege. And four, the karāma manifests as what I call "extraordinary sensory attunements" for individual blind Ummārīs. In place of the notion of sensory compensation, which is rooted in a logic of loss and equivalence, I argue that alternative sensory "attunements" better captures the way that blind Ummārīs emerge as different kinds of sensory beings.

In the third section, I explore how karāma of the Ummār is transmitted genealogically, both theoretically and descriptively, with special attention to its gendered aspects. This section shows how blindness among the Ummār becomes a fundamental and embodied aspect of personhood and belonging. In the final section, I explore how Ummāris responded to conflicting representations of Ummārī blindness deployed by genomic researchers and global health activists from the capital city of Nouakchott. This investigation sheds light on how interpretations of the Covenant of Idde are dynamic and responsive to contemporary events and reveals how differences of opinion emerge over the meaning of blindness and the karāma among villagers.

The Story of the Covenant

I first arrived in Dali Gimba early in the morning.

So, you are interested in getting something from the history of this group here? — Okay— look, essentially, blindness here is an inheritance (*wiratha*). It has been with us for a long time—three centuries at the very least. The first one who was blind was Idde. Naturally (*tab i iyyan*), there was no blindness present before then.

When the **mother of Idde** was pregnant, with him in the womb, a strange person, **a shaykh**, appeared to her, awakening her during the night. Nobody else was able to see him. She was alone and frightened, but he spoke to her, saying, "You shall give birth to a child who is blind $(a m\bar{a})! - But$, do not grieve $(L\bar{a} tahzani)! - for in this is surely a great karāma (divine grace/miracle/honor).$

And that child was one of our grandfathers. His father was not blind; his mother was not blind; but just as was foretold, he was born blind!

And this is the blindness that you are seeing here now. Since that time— since the **Covenant of Idde** (*ahd Idde*) — when it was uttered that, "born to you shall be a child who is blind" — blindness has been present among us, manifesting in one creation after the next.

From this family, you see those who are born blind, and those who are born seeing — $y \,^{\circ}an\bar{i}$ — A blind man may see⁵⁷ the birth of a blind child, or the birth of a sighted child. However, a sighted child who is born in the family will never see the birth of a blind child thereafter. This is the wondrous design of *al-Mawlāna*,⁵⁸ who excels in the perfection of all things!

This telling of the story can be broken down into three components: the prophetic event

experienced by the mother of Idde, ⁵⁹ the miraculous event of the birth of Idde, and an account of

the system of genealogical transmission of blindness through the family. I will begin with an

analysis of the prophetic event, and detail its various implications, and return to the question of

genealogical transmission afterwards.

For the Ummār, this story is understood as a real historical event occurring in the past,

whose memory is preserved through oral transmission across seven generations until the present

⁵⁷ Seeing (ru'yā), is a word that is used to denote perceiving in general as well as specifically in the sense of eyesight.

⁵⁸ In Mauritania, Allah, the divine, is commonly called upon by the name Al-Mawlana ("The Master") in greetings, conversations, supplications, and religious discourses.

⁵⁹ Her name was unknown to villagers and she was usually referred to as simply the mother of Idde.

(See Figure IV). It provides Ummārī blindness with a certain historical depth and clarifies its genealogical origins beginning with Idde. Although the exact date of the event is unknown, based on oral historical accounts of tribal history and genealogy, I estimate that Idde was born sometime around the middle of the 18th century, and in the Trarza region, where the caravans of the Awlād al-Faqi tribe (the parent family of the Awlād Ummār) circulated during that time. Although various blind and sighted Ummāris differed in their interpretations of the story, I never heard any villager who doubted its veracity or framed the story as a fictive allegory.

The Annunciation of Maryam

Beyond being constituted as a historical event, the story also expresses important symbolic connections about the status of Ummārī blindness as a miracle from God. The basic narrative structure of the story bears an uncanny resemblance to the well-known story of the "Declaration of Gabriel" (*i* '*lān jibrā* '*īl*), or what is known in Christian discourse as the "Annunciation to the Blessed Virgin Mary." The story of the Declaration of Gabriel (henceforth called "The Declaration") offers a unique lens through which to interpret the Covenant of Idde (henceforth called "The Covenant") in relation to broader religious narratives that frame the understanding of prophecy, miracle, and nature. During my fieldwork in and around Dali Gimba, villagers often offered interpretations of local stories, events, and circumstances with reference to Islamic sacred history, especially through citation of scattered verses of the Qur'an that narrate these stories, and sometimes through further elaborations on these stories through references to the literature on *Qişaş al-anbiyā* '("Stories of the Prophets") which is a discourse that chronicle the sacred history of humanity reaching back to the origins of creation by drawing on a variety of sources.⁶⁰

In the basic structure of the Covenant, a mysterious invisible figure appears to the mother of Idde, and announces, or prophesizes, the birth of a blind child. The figure also declares the forthcoming blindness to be a sign of a "karāma" from God and implores the woman to "not grieve." In the Qur'anic story of The Declaration, the archangel Jibrā'īl (Gabriel) appears to Maryam and prophesizes the coming virgin birth of 'Īsā.⁶¹ The following sections explore these narrative elements in detail to identify core meanings tied to the Covenant of Idde.

The Invisible Spirit

Both stories begin with a woman visited by an invisible spirit mediator who serves as a messenger from God. The Qur'an narrates his appearance in the chapter "Maryam":

And mention in the book Maryam, when she withdrew herself from her family to a place in the East. So, she secluded herself from them and then We sent Our spirit (*ruhanā*) and he presented himself to her in the form of a complete human being (19:16 - 19:17).

For Maryam, this invisible figure was none other than the Jibrā'īl, or the "Holy Spirit" (*ruh al-qudus*), who is a leader from among the angels and the standard bearer of divine revelation prophets. Angels are beings that are made of kind of light ($n\bar{u}r$) that is invisible to humans. They operate within this social and spiritual domain that is veiled from "external" modes of sensory perception (*al-huwās al-dhāhiri*) and the ordinary "vision" of the human eyes (*baṣar*). In certain circumstances, they can become visible or sensible to certain humans at certain times. Maryam's

⁶⁰ This body of discourse primarily stemmed from Qur'anic verses which provide sporadic references to the stories of nations and prophets and events of the pre-Islamic past, but also draws heavily on texts like "al-Bidaya wa-l-Nihaya," authored by Ibn Kathir (d.1373), as well as references to other sources, such as "Isrā'īliyyāt," or the folklore about prophets from Hebrew sources on antediluvian history, the Exodus, the time of the prophets, and extra-biblical Christian apocryphal material on the life of Jesus, Mary, and the apostles.

⁶¹Blindness is also an important motif connected to the story of Jesus due to the fact that one of his most iconic miracles is the act of restoring the physically and spiritually blind person to sight (Kok 2012). Refer also to (Qur'an, 3:49).

angel spirit made an appearance in a "secluded" place, veiled from the visibility of other onlookers. Maryam physically encountered Ji'brail and apprehended him with her immediate bodily senses. The short Qur'anic verses referring to the story make explicit mention of the fact that she perceived the individual spirit "as a complete human being."

The Covenant also begins with a woman's encounter with a non-human spirit who comes to prognosticate about the life she carries in her womb. Like Jibra'il, this mysterious "shaykh" makes an appearance to the mother of Idde in a way that avoids being seen by other onlookers. As indicated in Muhammad Mahmud's rendition of the story, her husband—Idde's father—was present with her during the arrival of the figure at nighttime, but he did not witness any of the event. As some villagers opined, this could have been because he was asleep, or else he was awake but the shaykh's appearance was veiled from his visual awareness. She was, as the story mentions, awakened by his appearance. In both scenarios, encountering the messenger was an exclusive visionary experience. It is important to reiterate that both narratives reaffirm the sensory and corporeal nature of the encounter with the mysterious figures. In the Covenant, it is narrated that the mother of Idde was "awakened" by the mysterious shaykh, indicating that the apparition was not a dream vision, but a conscious, waking-state visionary experience.⁶² This detail indicates that these invisible entities become selectively perceptible *through* the bodily senses, and not only through some "extra-sensory" mode of perception, imagination, or inspiration that bypassed the external senses.

In later retellings of the "Covenant," I discovered that the shaykh that appeared to Idde's mother was actually not an angel, like the messenger in Maryam's story, but was actually a *jinn*. In Islamic thought, jinn are a free-willed species made of "smokeless fire" (*nār al-samūm*)

⁶² For ethnographic work on the role of waking state visions in the contemporary Muslim world, see (Mittermaier 2007). See also Professor Ware's forthcoming on the social role of "visionaries" in Islamic West Africa.

(Qur'an 15:27) who live alongside humans. Muhammad Mahmud explained that humans and jinns inhabit different dimensions (' $\bar{a}lam\bar{n}n$) and locations on the earth. Both species are equal in a moral sense because they possess free-will, unlike angels who are envisioned as pure agents of God's will. Humans and jinn are, however, unequal in power and knowledge because they are differentially positioned in a structural hierarchy of visibility. In the contingent life of this world (*dunya*), the jinn possess a perceptual advantage in visibility, because as explained through a Qur'anic verse, "Indeed He [Satan] sees you, he and his tribe [the jinnkind], from where you do not see them" (7:27). The jinn (like the angels) are ordinarily invisible to humans. However, humans are visible to the jinn.

According to Muhammad Mahmud, this ordering also has an important historical and temporal contingency to it. For millennia, jinn frequently appeared to people and exploited their natural structural advantage to intervene in human affairs, often times in negative and detrimental ways such as teaching evil magic or rousing delusion by mixing truths with lies. However, with the arrival of the Prophet Muhammad, a new spiritual governance was established on earth that proscribed the agency of the jinn to access and steal privileged knowledge from the heavens and suppressed their encroachments on the human world. Muhammad Mahmud said that this was one important way that the prophet Muhammad fulfilled his role as a "mercy to all worlds." According to some in the village, this is also the reason that encounters with jinn and magic abound in stories of the ancient past in societies across the world but have become rare and unusual in the modern day.

Moreover, Muhammad Mahmud also asserted that the hierarchy of visibility between jinn and humans will be inverted in the afterlife, when humans will be able to see jinn, but jinn will not be able to see humans. Although interactions with jinn in the human world are no longer

ordinary in the post-Muhammadan age, they do still occur, such as with the mother of Idde. The invisibility of jinn to humans has given them a unique relationship to the concept of blindness and differential capacities of seeing. The invisibility of the jinni spirit mediator takes on an additional layer of significance in the story of the Covenant because he appears in a visionary experience as a messenger who delivers blindness.⁶³

In Islamic discourses, Satan (*Iblis*) is not called a "fallen angel" but rather identified as a member of the species of jinn. Due to this, jinn are often assimilated with demons (*`afarīt*) among human Muslims and feared and detested as evil characters. Ummārīs often challenged these stereotypes and called against generalizations that categorically denounced all jinnkind. They would remind me that jinn have free-will and have personalities, just as humans, and face the same existential conditions in this life. Both species are subject to divine trial (*ibtilā* ') and are responsive to prophetic inspiration. Jinn may be believers and disbelievers, doers of good and evil.⁶⁴

Likewise, the Ummār stressed that the shaykh who appeared to Idde's mother was one of the righteous, well-doing, and believing men of the jinn, and is not one of the demonic jinn ones who trade in wickedness. In the story, the jinni shaykh is identified as a messenger of Allah, "al-Mawlāna," which confirms his status. Although the jinn's title as "shaykh" was sometimes interpreted to mean "old man," a number of Ummārīs said that he was actually a *shaykh altarīqa* (Sufi master), and saint (*walī*) of the Qādiriyya network.

⁶³Similarly, once during earlier fieldwork in Morocco, I asked a blind friend whether he had ever seen a jinn, to which he responded, "One time only, she was the one who took my vision—hers was the last face that I ever saw!" It was clear this comment was made partially in jest, but also undoubtedly in seriousness at well.

⁶⁴ Janice Boddy's classic ethnographic study of the Zār cult in Northern Sudan explores how interactions and possessions of jinn spirits provides women with access to privileged positions to make demands and reimagine society (1983).

Prophecy

The Declaration and the Covenant are stories that both narrate a prophetic event. The Qur'an tells the story of the Declaration of Gabriel in a verse from the chapter, "The Family of Imran":

And when the angels said, "Oh Mary! Truly Allah gives you glad tidings (*yubashiruki*) of a word from Him. His name is the messiah Jesus, son of Mary, a leader in this world and in the hereafter, and he is one of those who are drawn near to Allah. (3:45)

The invisible spirit mediators are unveiled to deliver messages prognosticating about the future. In particular, both prophecies are revealing knowledge about the womb. As shown in Chapter Five, the womb constitutes one of the five domains of the "Unseen world" (*ʿālam al-ghayb*), knowledge of which is inaccessible to all except those to whom God specifically grants its "keys." The appearance of an invisible spirit mediator thus serves as a bridge between the domains of the seen and the unseen world, occupying an interstitial (*barzakhi*) space between different realms of existence such as life and death, or past, present, and future.

Moreover, the tenor of prognostication in both scenarios is cast in a specifically positive light, as "glad tidings." The prophecy functions to reinterpret (or perhaps *preinterpret*) the events and conditions in a positive and divine light. Finally, the prophecy is fulfilled with the eventual birth of the child in the miraculous manner that was indicated and revealed to the woman (either as virginal or blind), and through the additional predictions, such as the saintly and authoritative status of Jesus that is poised to manifest. These features of prophecy are further explicated in the interrelated concepts of karāma as miracle and grace.

Karāma as Miracle

The defining point of the story of Idde occurs when the mysterious shaykh discloses that the blindness contains a *karāma*. The word karāma is a polysemous word with a varied history in

Islamic discourse. It draws upon the Arabic triliteral root (k-r-m), which serves as the basis of morphologically related words with disparate meanings. When looking at how the Ummār use and understand the term, it becomes clear that they do not employ a single meaning but draw on several. I identify at least three discrete clusters of meaning embedded in their use, miracle, grace, and charisma, which are manifest in various bodily and social forms. Although these concepts are all important topics with their own places in anthropological study, the Ummārī understanding of karāma aggregates them and reveals the conceptual linkages between them.

The karāma of Ummāri blindness was often taken to refer to the idea that it was a source of miraculous, marvelous, or extraordinary abilities. This meaning draws on perhaps the most common use the word in the Muslim world. In most brands of Islamic theology, miracles are essentially believed to be common acts for prophets but theoretically possible for others as well. For technical reasons, these miraculous acts have often been categorized by the status of the person animating or conducting them, even when they appear as identical acts. A common stance among people in Mauritania was that when miracles are performed by a prophet, it is called a *mu jiza;* when they are performed by anyone else, it is called a karāma (pl. *karamāt*).⁶⁵

Furthermore, the defining quality of a miracle is often described as being a "rupture of custom" (*khark al- ʿāda*). "Custom" in this sense does not refer to a social convention, but the usual way that God behaves (*sunnat Allah*) or the usual chain of cause and effect. This idea of custom roughly corresponds to the idea of "nature," however it also diverges from it in some ways that may be worthy of further explication. As such, the eventicity of a miracle depends on the interruption of the routine operation of the world through the manifestation of a state of exception from nature.

⁶⁵ To maintain this theological distinction, translators sometimes prefer reserving the word "miracle," to refer the *mu jiza*, and "marvel," to refer to the *karamāt* of saints. In this work, I use the word miracle to refer to either.

Well known miracles of prophets narrated in the Qur'an include, for example, the cooling of the fire for Ibrahīm (21:69), the staff turning into a serpent for Mūsā (27:10), or the revelation of the Qur'an to Muhammad (17:88). Sufi literature and hagiographies are replete with accounts of the *karamāt* of saintly people. Famous miracles of living awliya include Amadou Bamba (d.1927) standing and praying on water (Paoletti 2018), or 'Abd al-Qadir al-Jīlanī (d.1166) performing thaumaturgical teleportation (*tayy al-ard*) to travel far distances in the blink of an eye, or Bāyazīd al-Bisṭamī's (d.874) practice of "free disposal" (*tasarruf*) to produce food out of nothing, or Baba Fariduddin Ganjshakar (d.1266) turning pebbles into sugar.⁶⁶

Some of these marvels are understood to be performed passively without the intervention or intention of their performers, signifying the divine agency of action. Others are capacities that arise as a volitional action on part of the performer. Some miracles involve control over nature, while others provide access to privileged forms of knowledge through the unveiling (*kashf*) of hidden knowledge through extraordinary perceptive abilities that reveal inner realities (*al-bāțin*) of persons and things in the world (such as the intentions or dream visions of others) and elements of the Unseen world (*ʿālam al-ghayb*) such as premonitions of the future.⁶⁷

For both stories, the miracle first manifests in the prophecies themselves, in the unveiling of ordinarily invisible spirits to the external senses of a human. Miracles then manifest in a form publicly accessible to everyone. The prophecy of the Declaration refers to perhaps the most iconic of all miracles⁶⁸ in sacred history, for both Christians and Muslims: the virgin birth of 'Īsā. The miraculous disruptive quality of this event is narrated in the following Qur'anic verse:

⁶⁶ For references to these and other types of marvels of Muslim Saints and their histories, see (Al-Qushayrī 2007; 'Aţtar 1990).
⁶⁷ In this work, I maintain the distinction between invisible worlds which are partially or contingently unknowable and the world of the "Unseen," which is characterized by overwhelming unknowability. Chapter Six presents a further discussion on this distinction.

⁶⁸ Islamic theologians differ on the status of Maryam, whether she is considered a saint or a prophetess, and in turn whether her miracles are to be classified as karamāt or as mu'jizāt. Barbara Stowasser notes that historically, theologians from the literalist Zāhiri school of thought, "found proof for Mary's prophethood in the fact that God's angels had informed her of things to come."

She [Maryam] said, "Oh my Lord! How can I have a son when no human being has ever touched me? He said, "It is thus that Allah creates what He pleases. When he decrees a matter, he just says to it 'be' and it is." (3:47)

The birth of a child without any male progenitor marks an interruption in the routine operation of the world. It is an event that indicates an aberration in Allah's typical mode of conduct, or what could be called a supernatural intervention in the course of history.

In the Covenant, Muhammad Mahmud draws attention to the appearance of blindness in a context, and within a bloodline, where "there was no blindness" prior to that event. With Idde, blindness was born from sightedness.

Karāma as Divine Grace

Aside from just being an event constituted by the disruption of custom, blindness among the Ummār also possessed the quality of being a karāma meaning divine grace. This meaning of the word draws upon the morphologically related verb form, *karuma*, meaning "to be generous," and the adjective *karīm*, "generous." This word forms the basis of one of Allah's ninety-nine names mentioned in the Qur'an, *Al-Karīm*, which is translated as "The Generous One," or "The Gracious." This name of God elevates the value of generosity and giving as one of the Godly qualities that ought to be reciprocated by humans, however imperfectly.⁶⁹

If karam refers to the quality of giving or generosity, the noun form karāma could be understood as the gift given by the generous. The karāma of the Ummar is an exceptional and privileged endowment given to selective people in the family. It is an endowment that surpasses what others are ordinarily endowed with. This exceeding quality of grace is noted by Julian Pitt-

However, she mentions that this view became marginalized, and that, "[n]either consensus-based main-stream doctrine nor public piety, however, came to recognize Mary's prophethood" (1994, 69). Instead, the dominant opinion that has congealed in the present day is that Maryam is a saint and not a prophet.

⁶⁹ Imam Fode Drame notes that names of Allah are divided between qualities that ought to be embodied by humans, and qualities that are reserved for the divine (2015).

Rivers, who describes it as "something over and above what is due, economically, legally, or morally; it is neither foreseeable, predictable by reasoning, nor subject to guarantee" (1992, 239).

As a prophecy of glad tiding and signification of divine grace, these stories both function to reinterpret (or perhaps *preinterpret*) something that could otherwise be interpreted as a punishment from God (*'adhāb*), or a defect (*'ahāt*), or a source of disgrace (*'ār*), either in the concept of blindness, or for Maryam, in the prospect of giving birth to a child as a young, unwed girl. Both stories acknowledge these dominant narratives and symbolic associations but subvert them by recasting them as blessings from God, and sources of honor and value. Because blindness comes from God as grace, it is celebrated and serves as a sign of privileged connection to God. It is also important to note that the framing of blindness as a blessing that is *given* inverses the commonly held view of blindness as a blessing (of sight) that is *taken away*. Blind Ummārīs do not "lose vision," they gain blindness.

Commandment to "Grieve Not"

The last concordance between the Covenant and the Declaration is the message shared by the invisible spirit mediators commanding the women to "grieve not." For Maryam, this is found in the Qur'anic ayah:

Then the throes of childbirth brought her to the trunk of the date tree. She said, "Woe to me! Would that I had died before this and I were a thing completely forgotten! Thereupon he [the angel] called her from beneath her that, "Grieve not [$l\bar{a}$ taḥzanī], for indeed Your Lord has caused a rivulet to run beneath you. (19:24)

A number of villagers explained that this message was not just a show of support or solace from the sprit messenger but was actually a divine commandment to reject a state of grief or melancholy. Although prophecies are typically understood as statements made in the present that foretell a definite future, Ummārīs understood that the promise of the karāma critically depended on individuals meeting the conditions of rejecting sorrow (*huzn*). This action was essential to the fulfillment of the prophecy and the realization of divine grace.

As one blind Ummārī man explained, karāma was *not* a consequence or automatic compensation of blindness. "Many blind people all around the world find no benefit in their blindness." Even among the Ummār, there were a few people rumored to have "spoiled" (*fasadat*) their karāma. Being anxious or discontent with one's fate could potentially keep the prophesized blessings from arriving. Inheriting the *karāma* requires an attitude of acceptance toward and contentment with one's own blindness. Several blind Ummārīs referred to their blindness as a divine ordeal (*ibtila*),⁷⁰ or a great possibility (*imkaniyya*), that when responded to properly – with patience (*şabr*), contentment (*rīda*) and gratitude (*shukr*) –provided access to divine blessings, gifts, and tranquility of the heart (*sakīna*).

Covenant With the Jinn

The story is typically referred to as a "covenant" (*`ahd*) because it is seen as a contractual agreement between the family of the Ummār and the jinn. The prophecy established a pact of non-interference between the two worlds. It forbade the Ummār from meddling in the affairs of the jinn, and in turn offered the family and their places of dwelling a special protection from the jinn.

For example, although several Ummārīs were skilled in the traditional Qur'anic esoteric healing practice called *ruqya*, they refused to treat any maladies caused by jinn possession out of respect for the Covenant of Idde. They often referred any cases of madness (*junūn*) needing

⁷⁰ In her book, "Knot off the Soul," Stefania Pandolfo analyzes ibtilā (divine "testing" or trial) as an event constituted by the human subject's encounter calamity and suffering, and the concordant, "call to accept the event as it is, confront reality and its hardship; but also, and most important, it is a call to maintain the effort and persist on the path even when our vision is clouded and the world around us is indifferent or hostile" (2018, 225).

exorcism to other practitioners, such as their pledged Sufi Shaykh who was more than capable of treating these cases. Ruqya practitioners distinguished pathologies associated with jinn possession through an analysis of symptoms as well as the practice of *istikhāra*, which is a ritual technique to reach decisions by channeling divine guidance through a process of what Edgar and Henig call "dream incubation" (2010).

During my fieldwork in Dali Gimba, my neighbor was a sighted Ummārī man suffering from a bout of paralysis. His son had taken him to medical clinics in Nouakchott, but no biomedical etiology was found for the condition. Most in the village, however, were convinced that the old man was paralyzed because he had performed a *ruqya*, a rite of jinn exorcism, in violation of the covenant of Idde. Respecting the covenant gave Dali Gimba a special layer of protection from the harmful presence of Jinn and other visitors with illicit intentions, who were repelled from the village and its surrounding areas. Ummārīs and others commented on the sense of security, sanctity, and peaceful environment experienced upon entering Dali Gimba. They recognized this as part of the karāma associated with blindness.

Transmission of Blindness

Idde was the first one to be born with blindness, but certainly not the last. He married (a sighted woman) and had a son named Ummār, who carried his father's blindness. Since then, blindness has persisted among the progeny of Idde. Since Ummār was Idde's only childbearing offspring, his descendants refer to themselves as the "Awlād Ummār" (the sons of Ummār). The karāma prophesied for Idde is repeated and transmitted genealogically as an inheritance (*wiratha*). Through this genealogical transmission, the karāma given to Idde was not limited to him. It was to be spread through an entire family. It is not bestowed on an individual person but is cast upon an entire family and specific genealogy of descent, infused in their shared circulation

of blood. In this way, the Ummārī karāma flows like God's blessing to Abraham, or the blessings that come with descent and consanguineous connection to the Prophet Muhammad.

In his narration of the Covenant of Idde, Muhammad Mahmud expressed an understanding of how the karāma was inherited and transmitted based on oral history and observations on its occurrence over the past seven generations. This local understanding of inheritance proceeds upon these four basic rules. The first three rules correspond to direct quotes from Muhammad Mahmud's narration of the Covenant of Idde presented above ,while the forth comes from a quotation from another occasion.

- "From the Ummār, you see those who are born blind, and those who are born seeing." The family of the Ummār is fundamentally composed of blind and sighted members.
- "A blind Ummārī may see the birth of a blind child, or the birth of a sighted child." The inheritance of blindness is contingent.
- "A sighted Ummārī never sees the birth of a blind child." Blindness is only begot of blindness. Once a sighted child is born, the possibility of inheriting blindness ceases in their future bloodline.
- "Blindness is transmitted through blind Ummārī males." Although both male and female Ummārīs are born with the blindness. Blindness is assumed to only passes through males to the next generation.

Inheritance (wirātha) does not only indicate a genetic basis of transmission; but also alludes to the sense in which blindness is a valuable patrimony possessed by the family at large. The Covenant of Idde and the narrative of blindness are crucial to the Awlād Ummār as a whole. The two are intertwined. The family defines the blindness, and the blindness defines the family. For blind Ummārīs, blindness is not coincidental to their sense of personhood; rather, it is essential to it, much as the belonging produced by blood kinship is essential to personhood. This is why blind Ummārīs would reject the growing convention in some disability circles to use

"person-first language" when referencing disabled alterity (such as using the term, "a person living with blindness" as opposed to "a blind person," to avoid defining people by their disability). For blind Ummārīs, blindness isn't a secondary feature of their identities; it is an intimate part of who they are, and it provides a fundamental mode of relatedness in their social lives. This affiliation with blindness is critical to stances that Ummārīs take against pressures to submit to surgical intervention, because such initiatives threaten to remove blind Ummārīs from their own personhood and sense of genealogical belonging.

Ummārī Blindness and Genealogical Imagination

The Ummārī account of the inheritance of blindness maps directly onto local Saharan idioms of blood kinship based on patrilineal descent and tribal segmentation. In societies that are organized by the principle of segmentation, social groups are modelled hierarchically on the basis of genealogical relationships. "Segments" of the family are composed of individuals who share a common genealogical ancestry. These segments are then organized in larger units built on nested relationships. Sometimes these segments do not descend from a common ancestor but are instead gathered in alliances. Still, these segments are arranged in nested hierarchies that resemble patrilineal pedigrees.

Arab Saharan kinship terms are rooted in a nomadic Bedouin rhythm of life. The largest segment is the tribe (*qabīla;* pl. *qabā`il*). Each tribe is composed of multiple clans (*afkhādh*; sg. *fakhdh*), and each clan is composed of multiple *khiyām* (sg. *khayma*). The khayma is the fundamental unit of kinship in the system. The term doubles in meaning: it refers to the object of the "nomadic tent," but also in Saharan and Maghrebi Arabic it is the general term for family, and it is used specifically to denote the immediate family unit. This concordance between kinship term and house structure is also denoted elsewhere in the Arabic-speaking world as *bayt*,

which refers to both as "house" and a "household." In these regional dialects, the word is closely tied to the marital bond and the family shared by a man and a woman.⁷¹ The Hassaniyya term for being married is *mitakhayyim*, which is the participle form of the word meaning, "to pitch one's tent."

Descent in this system is reckoned through the patrilineage. Saharan Bedouin kinship systems are classified as preferring parallel cousin marriage, which is also called father's brother's daughter (FBD) marriage. These scales of kinship are relational. At times, the same unit may be referred to as a *fakhdh* (clan), but on another occasion, it could be referred to as a *gabila* (tribe).⁷²

⁷¹ Monogamy remains the norm among Bidhān folk in the Saharan West. Polygamy is practiced by some Sufi shaykhs among the Bīdhān, and commonplace among Harātīn.

⁷² See also various approaches to segmentary genealogy (Evans-Pritchard 1940), as a form of tribal political organization (Gellner 1990), as a folk model of tribal politics (Peters 1967), as a "structure of meaning" (Meeker 1976), or as a territorial system of rights and resources (Behnke 1980, Wilkinson 1987). For other accounts of Bedoin kinship systems, see Abu-Lughod (1986) and Shryock (1997).

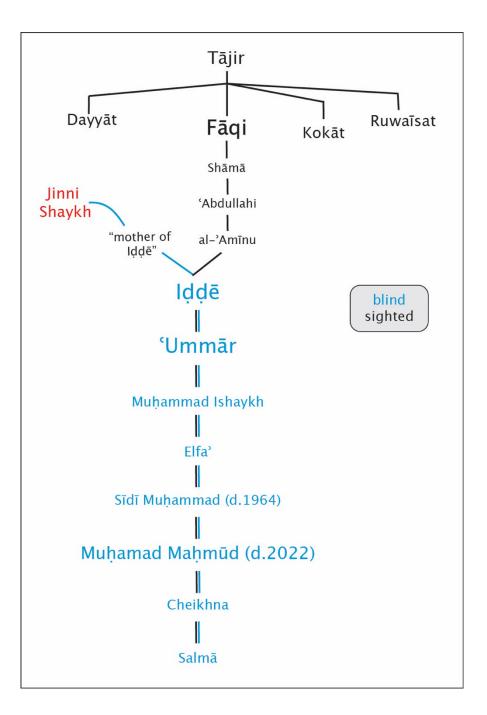


Figure IV: Genealogical Tree of Ummārī Blindness and Karāma

Figure IV shows how patrilineal descent based on blood and the spiritual transmission of the karāma of blindness converge in a genealogical tree (*shajara*), from the perspective of a blind child of the Awlād Ummār. The Ummār are a clan from the tribe called the Awlād al-Fāqi. Lineage is traced back twelve generations, to a man named Tājir, the father of al "al-Fāqi." Four

sons of Tājir – Dayyat, Kokāt, Fāqi, and Ruwaisat – are recognized as progenitors of four major tribes who mostly reside in the Hodh region today.⁷³

Blindness enters the bloodline with Idde, who is from the Awlād al-Fāqi. From him, blindness extends seven generations into the present. Because Ummār was the only child of al-Faqi, all blind members of the family can trace their lineage back to Ummār, and thus call themselves the "Awlād Ummār," which literally means "the sons" of Ummār. The Ummār is also composed of sighted members. Although they are sighted at present, they descend from immediate or distant agnates who were blind. Their sightedness is born from blindness.

The Awlād Ummār are formally the smallest segment of the family structure. The khayma is extended to other members of the Ummār. As one member of the Ummār said of another, "He and I, we are of one khayma, children of the khayma of Ummār." Under the Mauritanian state's national regime of identification, the name Ummār (spelled "Oumar" in French) is taken as the "Nom de famille," designated on national identity cards and passports. To note, these same forms of identification do not carry any designation for a larger clan or tribe name.

The name "Ummār" also serves as a surname for members of the family. Following Saharan Hassaniyya Arabic custom, individuals of the family (when outside the village of Dali Gimba) might go by their given name, concatenated with *wuld Ummār* for males, or *mint Ummār* for females. Although wuld and mint literally mean "son of" and "daughter of," here the naming convention refers to the individual in relation to their broader family.

⁷³The four tribes that descend from Tājir are lesser-known confederates of the more powerful tribal federation of the *Mechdouf*, whom they aligned with in 19th century.

Ummārīs affirmed that there is a standing marriage preference for one's "awlād al-'am," (the children of the paternal uncle), but used this kinship category not to refer to one's "literal" first cousins, but rather to anyone from the same clan. For members of the Awlād Ummār, this meant there may be a preference to marry another member of the Awlād al-Faqi, but not necessarily someone from the Awlād Ummār. In fact, there were various pressures proscribing marring one's first cousins, and the Ummār almost never married from the Ummār. As one older woman villager reported, based on her memory, "there was no marriage between the Awlad Ummār except the marriage of 'Abdullāhi [d. 1996]." The most obvious reason for this was that most first and second cousins within the Ummār were proscribed from marriage due to the widespread ties of milk kinship ($rad\bar{a}$). Virtually all children of a certain age group in a village like Dali Gimba are connected through shared breastmilk, which confers a kind of incest taboo and "unmarriageability" (mahram) status just like shared blood or the sense of familial proximity (qarāba). Because most of the Awlād Ummār lived in Dali Gimba, this network of milk kinship effectively prevented any marriage between members of the Ummār, and in practice, marriages often involved members from the Awlād Fāqī, or from other tribes, or even between member of different "races," such as with harātīn, although these were rare because of strong racial sensibilities of miscegenation and emphasis on race in considerations of marriage suitability $(kaf\bar{a}^{a}).$

Because the inheritance of blindness from an Ummārī is selective and contingent (Rule #2) and blindness is only begotten of blindness (Rule #3), Ummārī blindness constitutes a specific, exclusive genealogy within the family network of the Awlād Ummār. This pattern of inheritance bifurcates the Ummār family into two discrete groups: the blind and the sighted. Although blindness and sightedness are binary, the category of blindness differs from the

category of sightedness, because blindness is linked to a central connected network of inheritance. Sighted members of the family, however, are excluded from this privileged genealogy. They are not connected to one another through shared of blindness. Idde and Ummār serve as the blind progenitors of this family from whom everyone traces their descent. Because blindness reflects the inheritance of the karāma, it serves as a privileged and exclusive genealogy within the larger structure of Umari descent. Blindness serves as an icon of the family and configures its default status. When one mentions the Awlād Ummār, blindness comes to mind. In this context, although sightedness is genetically considered to have a "dominant" pattern of inheritance, its irregularity or deviance renders it the "marked" or irregular category.

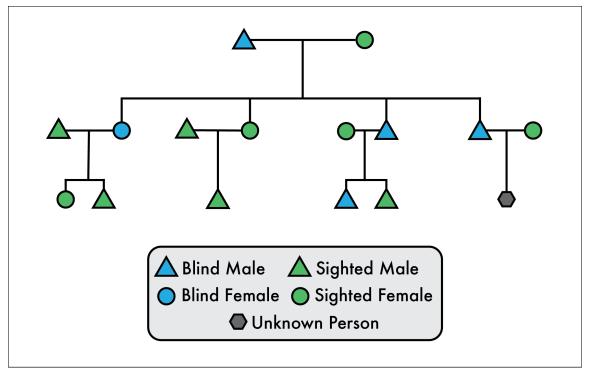


Figure V: Blindness and Sightedness in an Ummārī Khayma

This diagram provides an example of how blindness is selectively transmitted in one family based off oral historical accounts of ancestry (*intisāb*). The first child (leftmost) represents Taytā, a blind Ummārī woman who married and gave birth to sighted children. The second is a sighted Ummārī woman who gives birth to a sighted child. The third is a blind Ummārī man who fathers one sighted and one blind child. The fourth child (rightmost) accounts for a blind Ummārī tribesman who migrated from the Hodh to North Africa and lost contact with the family.

Gendered Transmission

One critical component of the Ummārī understanding of blindness is its gendered transmission. Blind Ummārīs understand that blindness is inherited by female and male children alike. The community even regards blind women as being possessors of the Ummārī karāma's charismatic effects and sensory attunements (discussed below). However, it is widely believed among villagers that blind women do not pass blindness or the karāma to their offspring. As they understand it, based on their experiences and oral history, blindness is only transmitted by blind Ummārī men.

Evidence to support this claim, however, is hard to find because blind Ummārī women almost never marry. All living blind women of the Ummār have never married. Dali Gimba had a high number of blind spinsters who never moved from their natal khaymas.⁷⁴ Blind Ummārī men, on the other hand, always married and had children. Ummārī elders and women stated that nobody would ever seek the hand of blind Ummārī women. Muhammad Mahmud knew of a single exception from his life: a woman named Taytā from his grandmother's generation who married (a non-Ummārī tribesman of the Awlād al-Fāqī) and had children, and they were sighted. Figure V provides a pedigree diagram that represents this example of Taytā's children. The story of Taytā was sometimes offered as anecdotal evidence that blindness and other sensory capacities passed only through men.

During my fieldwork in Dali Gimba, I spent considerable effort trying to understand why blind Ummārī women do not get married, yet I never reached any definitive reasoning. Some villagers suggested that families in the region viewed matches with blind Ummārī men as favorable because they presented the opportunity to parent a blind child and inherit the karāma,

⁷⁴Bidhan societies are formally patrilocal, although practically speaking, married women often spend considerable time with their natal families, such as during the peri-natal period or when their husbands are away for work.

yet according to local logic of gendered inheritance, this was not a possibility when marrying a blind Ummārī woman. Others suggested that blindness prevented women from being able to perform some of the fundamental roles for a wife (such as preparing tea), while blindness did not exclude blind Ummārī men from performing tasks deemed to be essential for a husband. It is important to note that there were only a small number of activities that blind Ummārī women were unable to do. Blind Ummārī women were still able to fetch water, prepare food, clean, take care of children, build and repair mbārs, and numerous other activities. However, one woman suggested that serving tea specifically may be a seen as a symbolically important activity among people at the core of femininity.

Due to the fact that blind Ummārī women never married, Dali Gimba was full of unmarried blind women. I asked many of them what they thought about the marriage issue, whether they wanted to marry, and what they thought was the reason no suitors came. Asking such questions, especially as a male ethnographer, was difficult at first, because expressing a desire to marry was seen as a declaration of one's sexual desires, and thus something inappropriate to talk about. Eventually, however, women came forward with different opinions. Some women told me that they truly did not want to marry. These women often framed this choice of celibacy as a feminine spiritual pathway of dedication to God. A few blind young women did confide in me their desire to marry. In between bouts of giggles, one woman listed the qualities of the kind of man she dreamed of marrying, and recited bits of poetry about what kind of wedding she would have. She did not, however, have any reasoning to offer as to why nobody would seek the hand of blind Ummarī women, aside from suggesting that perhaps the people from outside the village may not know what these women are capable of doing. This understanding of the gendered transmission of blindness was consistent with local ideologies of genealogical inheritance. For the Ummārīs, however, the scarcity of evidence did not complicate their understanding of how blindness was transmitted, because it was based on an established ideology of descent. In the Saharan West, perceptive capacities and sensory attunements are strongly linked to patrilineality.

Saharans understood this to be a natural rule that extended beyond the confines of their own social worlds. Once a blind Ummārī asked me about my own nearsightedness and how it runs in my family. I told him that all my brothers and my father wear glasses but my mom does not need them. He was pleased with my answer and told me that this was expected, because the capacity to see is inherited from one's father.

This understanding of the inheritance of sensory capacities also supports the division of labor among social classes in Mauritania. Musical abilities, for example, are widely understood to be genealogical inheritances of the *igawwen* griot bloodlines that are passed through patrilineal descent. Dīmi mint Abba (d. 2011) and Gharmi mint Abba, who are arguably the most famous singers in Mauritania, are sisters whose exceptional talents are credited to descent from their father, Sīdatī ould Abba (d. 2019), who himself is celebrated as "the greatest beydane male vocalist of the twentieth century" and recognized as the inheritor of the poetic and musical griot tradition of Seddoum ould Ndjartou (Lavoie 2019), who was a renowned poet and singer from the Awlad Mbarak tribe credited with standardizing the genre of popular Hassaniyya poetry in the mid-eighteenth century (Norris 1968).

Another example of this pattern of inheritance came with prominent discussion about the pain tolerance of various ethnic types, and the common stereotype among bidhan and others that harātīn people are physically suited to hard labor under the Saharan sun, because of qualities of

the blood, inherited qualities, and the natural disposition of their bodies, which could tolerate more pain than others. Gender, however, was understood to function in the same way. This kind of talk offered one example where sensory ideologies and ideas regarding the sensory capacities intersected with racial ideologies and the social production of racial difference.⁷⁵ More examples of such acquired sensibilities and racial ideologies follow.

These understandings of heredity and the inheritance of sensory qualities is fundamentally rooted in the notion of shared blood and descent, in a material sense. It is not just a result of the transmission of tradition, acquired habits, and patterns of experience among any particular ethno-social caste.⁷⁶

The primacy of agnatic relationships in the determination of sensory attunements and perceptive abilities does not necessarily mean that other influences are irrelevant. One telling example of this is found in relationships formed though shared milk ($rad\bar{a}$ 'a). In Islamic discourses, breastmilk is a vital substance that fosters new adoptive, familial kinship networks constituted by exclusions from marriage between milk siblings. Saharans regularly associate qualities of a person's "sensitivities" (*hassasiyyat*) with their relations of milk kinship. In addition to this horizontal system of relatedness, breastmilk is understood to transmit the physical, mental, and moral characteristics of the nurse to the suckling child (Giladi 1999, 44; Fortier 1998, 2007; Isidoros 2017).⁷⁷ This logic of transferal is articulated in the maxim, *fa-inna* '*l-labana yu* 'dī ("certainly milk passes [natural dispositions]") attributed to Ibn Sina (d.1037) (1906, 152). Imam al-Ghazali advises Muslims to exercise care in selecting a wet nurse for their own children due to the fact that the nursing mother's spiritual impurity could knead filth into the

⁷⁵ See also (Obasogie 2013) for an analysis of the discursive foundations of racial ideology in sensory ideology.

⁷⁶Shryock (1997) highlights how "the genealogical imagination" is a transregional model of hierarchical thinking that organizes various kinds of knowledge, such as history, scholarly authority, or the construction of nationalist communities and identities. ⁷⁷Breastfeeding is also understood to work in reverse, so that qualities of the child are conferred to the suckling mother.

substance of children's growing bodies and cause irreversible damage (1967, 92). At xthe same time, qualities of eloquence and wisdom could also be attributed to sharing the substance of breastmilk.

During my fieldwork in Dali Gimba, a man named Mustafa sorrowfully shared a story from his youth when he lost his temper and killed a donkey by throwing a rock that accidentally struck its head. While he narrated the story, others listening in took the opportunity to lampoon him: "Mustafa is hot-headed because he was breast-fed by Toutou, that wild Harātinā woman!" Others present roiled in laughter. Other times, Mustafa's inheritance from Toutou was praised for endowing him with strength that his brothers and sisters did not possess.

It is noteworthy that in both the Covenant of Idde and the story of Maryam's virgin birth of I'sā, the natural rule of patrilineal descent is subverted.⁷⁸ Idde did not inherit his father's sightedness, nor was there any blindness pre-existent among his paternal ancestors. Instead, the blindness that he acquired was sourced through his mother, with the encounter of prophecy. With the virgin birth of Īsā ibn Maryam, the exception to the rule of patrilineal descent went beyond just subverting the inheritance of sensory capacities from one's father; it eliminated the role of the father from the process of filiation entirely. "Īsā ibn Maryam" stands alone in Islamic sacred history as someone identified matronymically, through reference to his mother.

Karāma as Charisma

Blind Ummārīs are immensely proud of their blindness. They see themselves as belonging to an exclusive and privileged genealogy, selected and graced by Allah. Whereas the

⁷⁸ One could add here the example of inheriting the nobility of prophetic lineage through the Prophet Muhammad. Although descent is usually thought to be exclusively patrilineal, all those who claim to be descendants of the prophet, known as *sharīf* or (*shurafā*, pl.) in Mauritania, or *sayyid* elsewhere in the Muslim world, derive their lineage through the prophet's daughter Fatima, as he had no surviving male children. Various Islamic theological traditions have sought to account for and "solve" this exceptionality of Fatima in various ways (Ho 2006, 149-150).

sections above detail the karāma's role as miracle and grace that draw upon the relationship between the Ummār and God, the Ummārī karāma also comes as "charisma."⁷⁹ Specifically, I outline how the karāma endows blind Ummāris with personal qualities of charm, privileged accessibility, social capital, honor, generosity, and authority.

Charm

Blind Ummārīs frequently expressed remorse for their sighted siblings and cousins. One young blind Ummārī man told me that the blind are strong $(qaw\bar{i})$ in relation to the sighted, who are weak $(d\bar{a}\,\bar{i}f)$.⁸⁰ Success comes easily to the blind. Their affairs are blessed. They always seem to find a way out of problems. The distinct sensory habits that blind Ummāris develop, which are detailed in Chapter Five, generate distinct forms of social capital. They are better listeners with sharper memories. Most believe that their blind habits of explicit communication equip them to be more eloquent, skillful, and effective in speech. These are especially important skills in the Saharan West, where skill in language and expression and memory are especially valued as signs of intelligence. These qualities quickly translate into success in building connections, being persuasive, gaining respect, and in business endeavors. Blind Ummārīs recognize that these capacities were things that neither their sighted counterparts, nor villagers from any of the villages neighboring Dali Gimba, were capable of doing. Another blind Ummārī man told me that these personal qualities of the blind were so pronounced that it made it difficult for him to relate to his sighted kin. He told me that he felt closer to his blind cousins than his sighted brothers.

⁷⁹ Gardet suggests that the term "seems likely to have come about through phonetic assimilation to the Greek χάρισμα [khárisma]," in its original sense of "the favour bestowed by God completely freely and in superabundance" (2012).
⁸⁰ This sentiment was challenged by some sighted members of the family. One young sighted Ummārī man suggested that such a view failed to consider how the sighted bear a special responsibility to provide for the clan, work to generate cash, and take care of labor that the blind cannot do.

Although I refer to this quality as charm, it could also be likened to the concept of "baraka," which refers to the divine blessing that flows like energy through persons, objects, and spaces (El-Aswad 2002; Geertz 1968; Gilsenan 2000a; Westermarck 1926). Baraka is related to karāma, in the sense that a karāma is an expression of baraka. However, the term baraka was rarely attributed to the Ummār in Dali Gimba and was reserved to describe the power of Sufi masters.

Access

One blind Ummārī suggested that blind Ummārīs are more successful because blindness provides unique forms of access in society that are not available to the sighted. One example of this came in the special ability to traverse borders and travel across west African territories with ease.

Most Hassanophone Mauritanians living in the Hodh were wary of crossing the border and travelling to Mali, even though it was only 30km from Dali Gimba. When they would find themselves in need of something from the city, such as specialized medical care, most preferred travelling to Nouakchott, which was a much further and arduous journey than travelling to Bamako, the capital of Mali. Very few Bidhān Mauritanians living in the hinterland knew French or Bamanan, the most common languages of Mali, and feared being held up by the Malian authorities and having to pay bribes. Moreover, since the beginning of the Malian civil war in 2012, Bidhān Mauritanians have been especially reluctant to travel through Mali, where bidhān are associated with separatist movements from Azawad, Islamism, and terrorism in the country.

But blind Ummārīs were undaunted by travel through Mali. Shayyakh is a blind man from Dali Gimba who went on a trip to visit his sighted brother who was working in the Ivory Coast. He told me the story of how he was able to undertake this arduous journey across West Africa by himself with relative ease by using his blindness, despite not having any papers. He said that whenever he was stopped at a checkpoint, he just pointed to his eyes and remained silent. "I didn't speak a word, no matter how hard they tried, and eventually they just let me go." Later, when he was stopped at another checkpoint, he told them that he was travelling to seek medical attention, again pointing to his eyes, and they also let him pass without taking any bribes. Shayyakh was well aware of the allure of healing the blind commonly held by sighted people and used it to his advantage. "They always let a blind person pass if they hear you are seeking medical care."

Capital

Over the past twenty years, the Ummär have gained a widespread notoriety in Mauritania. This process was especially promulgated by news media about the village that spread through WhatsApp groups, a TV news special, and a series of online articles published on the village. Alongside this media attention, small and large charitable initiatives have brought an immense amount of capital into the village. Muhammad Mahmud was easily able to solicit the attention of the then president of Mauritania, Mohamed ould Abdel Aziz (in power from 2008 to 2019), who arranged for an experimental surgical project for the villagers. Although the mission of this project was not aligned with what villagers were interested in at the time, and despite the fact that outcomes of this project are inconclusive (as discussed in Chapter Five), this project of medical intervention still demonstrates the capacity of blind Ummärīs living in the remote village to make connections with prominent political leaders and to attract the attention of people through media. The most prominent example of this was the Ataya project, which brought nearly 2.5 million USD into the village through a massive development project, but several other development projects launched in Dali Gimba through national and foreign investment could be

cited. Examples of development projects such as these show how blind Ummārīs have served as major conduits of capital and points of contact for development, philanthropic, health, and education initiatives from Mauritania and foreign humanitarian aid, especially from the Gulf.

Honor

The Ummārī karāma is also closely linked to the notions of honor and generosity. This concordance finds its basis in another linguistic concordance of karāma, through its morphologically related term *karam*, meaning honor or nobility,⁸¹ and the related term *ikrām*, meaning hospitality. This morphological form contributes to another one of Allah's ninety-nine names,⁸² *dhū l-jalāli wal-ikrāmi*, which is translated as, "The Lord of Majesty and Honor." These qualities are principally a property of the divine, and secondarily a property acquired by humans.

When the child of a blind Ummārī is born, it takes a few days or weeks before the evidence of blindness or sightedness is clear. When blindness is confirmed, the news spreads and villagers have a hard time containing⁸³ their joy and celebration. Special prayers of gratitude (*shukr*) are offered. The sense of honor enjoyed by blind Ummārīs is also recognized and respected by others, not just within the Ummār, but in the Hodh, and the wider national public, among whom the family has gained recognition and became famous (*mashhūr*).⁸⁴ As such, the possession of karāma also confers spiritual power, rank, and authority. Karam in this sense joins an array of concepts denoting social status: *murū'a* (virtue or manliness), *īzz* (esteem), *ihtirām* (respect), *hurma* (sanctity), and *sharaf* (nobility).⁸⁵

⁸¹ In the section on grace, I translated the term karam as grace or generosity. Here I focus on its interrelated meaning of honor. ⁸² The fact that two of the essential ninety-nine names of Allah come from the same triliteral root suggests a logical connection between two disparate semantic fields contained within a single morphological category (k-r-m).

⁸³ Generally, celebration and public expressions of happiness following a positive outcome are suppressed out of prudent regard for human feelings of jealousy and envy, which, if triggered, can attract the evil eye.

⁸⁴ Blind interlocuters explained that term *mashhur* meant that a person was "heard" of before they were "seen," implying a certain hierarchy or ordering of sensory modes within the concept of fame or notoriety.

⁸⁵ For a detailed account of the relationship between generosity, baraka, and everyday notions of hospitality in another Bedouin context, see Shryock (2008).

Among the Awlād al-Faqi and other groups in the Hodh, marrying a blind Ummārī man is often regarded as a favorable match. For an outside woman and her family, marrying a blind Ummārī man carries the possibility of bearing a child who inherits the karāma of the Ummār, and its associated blindness, its charismatic and blessed qualities, and the extraordinary sensory capacities it affords. Likewise, sighted women of the Ummār were all married by the time they reached their 20s and experienced no shortage of suitors. However, as discussed earlier, the sense of elevated social rank and marriageability enjoyed by blind Ummār men did not extend to women.

Generosity

The Ummārī karāma is also expressed in the quality of generosity and hospitality within the social space. As discussed earlier, on one hand karāma is understood as the gift given by al-Karīm (The Generous), as in Allah. But the notion of karāma as grace is also reciprocal. Grace received by someone from the divine translates to generosity paid to the people. Muhammad Mahmud demonstrated this link between miracle and hospitality by referring to the famous hadith of the prophet: "Whoever believes in Allah and the Last Day ought to show hospitality (*yukrim*) to their guests."⁸⁶ As he further explained, because the performance of hospitality is a sign of belief, and belief is a gift given to humans by God's grace, then the performance of hospitality is recognized as a sign of God's grace on the performer.

Blind Ummārīs are regular hosts to a steady stream of visitors and tourists coming to Dali Gimba. These visitors come for several reasons. Some are tourists from Mauritania, the Arab world, Muslim countries, or from Europe. These people come seeking the village after reading about it online and wanting to see the marvelous spectacle of a blind world for themselves. More

⁸⁶ Hadith: Sahih al-Bukhari #6136

frequent than these kinds of visitors, however, are Mauritanians who come from the capital for the purposes of conducting research, or implementing public health, educational, or gender-based initiatives. On one hand, these kinds of visits are philanthropic, conducted by people interested in offering charity and improving the lives of people in the village. At the same time, these visits also resemble ritual pilgrimages or visitations $(ziy\bar{a}ra)$ that are commonly undertaken by Saharans to Sufi shaykhs and other righteous people (*salihīn*) with the goal of acquiring general blessings (*baraka*). For example, while a delegation may arrive from the capital with the purpose of documenting the number of school-aged girls in the village, for example, at the same time they would seek out Qur'anic esoteric healing (ruqya) or other services performed by the Ummārīs' extraordinary sensory attunements. Most visitors of this type come to Dali Gimba with philanthropic and charitable intentions. Given the exceptional distance from the capital, most visitors who come also remain in the village at least for a night, if not a few days (or in my case, for several years). In addition to these visitors, another stream of visitors to Dali Gimba includes people who come seeking Muhammad Mahmud's water divination services. Given this traffic, the villagers of Dali Gimba are constantly serving as hosts, further cementing the connection between the karāma of blindness, hospitality (*ikrām*), generosity, and honor (*karam*).

Authority

Finally, the karāma of the Ummar is not only "charismatic" in the sense of being favored by God or as a special magnetic charm, but also in the sense of mediating charismatic authority, in the Weberian sense of possessing forms of leadership and sociopolitical authority stemming from the belief that Ummārīs have qualities that are "regarded as of divine origin" (Weber 1978: 242). Blind Ummārīs always serve as de facto leaders of the family, and it is commonly understood that the shaykh of the village will always be blind. Because this kind of charismatic

authority flows through the blood, it offers an interesting example through which to examine the transmission of charismatic authority.

Max Weber identifies "charismatic authority" as a kind of authority commanded by individuals whose leadership and domination stem from the social recognition among their followers that such people are divinely inspired, or at least exemplary in some sense. Because this type of authority is a quality of individual persons, it carries an inherent problem of succession for the group: How will the movement generated by the initial charismatic authority reproduce itself after the passing of the original leader?

Weber outlines several possibilities. The transfer of the Ummārī karāma follows in line with what Weber calls "erbcharisma," or "hereditary" transfer of charismatic authority, because it provides a means for charismatic authority to flow generationally. Typically, the hereditary transfer of charismatic authority is indeterminate, and thus often leads to schism. Anyone who claims lineage from the former leader can claim to be the heir of the original charismatic authority. However, the case of Ummārī karāma offers a special and exclusionary model of succession. It is delimited by the selective inheritance of an outward sign, namely the phenotype of blindness. The forms of authority that were originally endowed by charisma are reaffirmed by its successor, who also possesses the karāma, and this is externally verifiable.

Individual Miraculous Karamāt of the Ummār

Blind members of the family are known to possess extraordinary abilities, marvels, and miracles. For individual blind Ummārīs, this miraculous karāma takes unique forms. Ummārīs do not offer technical accounts of evidence and proof regarding these karāmāt; they leave it a matter of awe and wonder, and they recognize of their own limitations in understanding the workings of invisible or unseen worlds (*'alam al-ghayb*). Most of these attunements are

volitional – they can be exercised at will – yet they are understood to be mediated through a transcendent God.

Sometimes a blind Ummārī's karāma is expressed as an enhanced form of ordinary sensation. For example, a woman named Umeija is said to have the karāma of perfect listening, memorization, and recall. Skills in listening and memorization are of high value in Saharan intellectual culture, and they are central to the traditional pedagogy of Qur'anic schooling in the mahdhara system. Even in relation to the rest of the Islamic world, where recitation and memorization are crucial elements of knowledge transmission, Saharans are famous for their encyclopedic memories and oral transmission skills (Fortier 2016; Lydon 2005).87 Excellent memorizers in the country are classified as people with the ability to successfully memorize a passage of text after hearing it only three times. Several blind Ummārīs claim to have this level of memory. Umeija, however, is known for being able to memorize anything after listening to it a single time. She can be said to have an "audiographic memory," or the ability to store and recall audio memories with great precision as an analogue to photographic or "eidetic" memory. She is respected as someone who is extremely present ($h\bar{a}dir$) and uses attentiveness to memorize text so masterfully. She is referred to as a library of lengthy poems, holding entire manuscripts, authentic narrator of past events and quoting people, as a record of outstanding debts, as a codex of phone numbers, or for many other tasks.

⁸⁷Hamza Yusuf Hanson is a famous American Muslim intellectual who popularized Mauritania in the geographic imagination of North American and English-speaking Muslims. In a lecture published online, he extols the memory abilities of Mauritanians who regularly memorize the entire Qur'an without ever looking at the written text. Hanson tells one story of a Saharan scholar named Muḥammad al-Khadīr who was asked by the Basha of Egypt to go to Turkey, to transcribe the best copy of the "Qāmus al-Muḥīt" of Muḥammad ibn Ya'qūb al-Fīrūzābādī (d.1414), a voluminous dictionary of Arabic that is at least 4,000 to 5,000 pages long, in small print. After a few months, he came back, and they said, "Where is the book?" And he said, "bring some scribes," and he dictated the book by heart. Hanson tells another story to illustrate the exceptional memories of Saharans:

Muhammad Sālim was another Mauritanian who was once in Mali and two Bambara people started arguing in front of him, and one killed the other. When the police came they asked, "*What happened*? "And he said, "*I don't know, but bring somebody that knows their language*." And so they brought somebody and he said, "*he said ...*," –and then he just quoted it—he didn't know what it meant. And then he said, "*and then he said ...*" –and he quoted it. And he didn't know what it meant. It went back and forth until he the man determined what actually had happened. (Hanson 2022)

The Ummārī karāma also manifests as a special efficacy in practicing *ruqya*, the art of Qur'anic esoteric healing used to cure physical, mental, and spiritual ailments. These healing practices always used the recitation of select verses of the Qur'an, often times blown on water that would be drunk or poured on body parts. Other Ummārīs have more specific *karāmāt*. One blind woman, Fatima, is rumored to have the ability to communicate with birds. When I asked her about it, she affirmed this ability but clarified that her ability is less about *talking to* the birds and more about *listening to* them. She told me that birds typically speak among themselves, but on special occasions, they turn to address humans. In her opinion, listening to and understanding the language of the birds is "not difficult," because all it requires is that one remain attentive to their sounds, listening with the heart, so that one is receptive to the possibility of being addressed. She informed me that the kinds of things the birds might say include news about impending rain, information about visitors who might be coming to the village or issuing complaints about a lack of water for the birds.

The language of karāma is also invoked to explain how blind Ummārīs are able to do things that other (sighted) people would not expect them to be able to do. In this sense, karāma does not provide access to an action that is extraordinary; rather, it allows blind people to do things that are ordinary for a normal body. For example, blind Ummārīs can play cards, cook food, ride steeds, and traverse the badiya landscape. How are they able to do these things? Is it through extrasensory perception, or through sensory pathways?

Islamic sensory models offer a distinction between *basar*, which refers to the "external" sense of seeing, in which the eye observes the surfaces of the phenomenal world, and *basīra*, which refers to "inner sight," which allows the heart to perceive the true essences of all things.

Like karāmāt, *basira* is not exclusive to saints. Everyone has some degree of inner sight; it increases with the level of one's faith.

In another example, it is told that in the past, during nomadic times, there was a blind Ummārī who had an extraordinary ability to smell the people moving in faraway caravans. Several Saharans told me that the body odor of each human was unique, and that they reveal their inner states and intentions through their scent. People claimed to have the ability to interpret these odors in close interactions, with varying degrees of ability. However, this man is remembered for his ability to perform this type of sensation from far distances, even several kilometers away, especially with favorable wind conditions.⁸⁸ In a few accounts, he is said to have used this special ability to detect cattle thieves approaching their encampment. He alerted everyone in the caravan to quickly pack up their belongings, mount their steeds, and head in the opposite direction to avoid the impending raid. Narrators of the story say this ability to smell danger was not only useful in settings of tribal hostility in nomadic times but is valuable in modern cities like Nouakchott as well, where they feel especially vulnerable to robbery and exploitation, especially as blind people.

Security is not the only use of the special olfactory sense. Older villagers recall that the ability was most often used to recognize incoming guests prior to their arrival, so that the encampment could slaughter a goat early and the meat would be ready upon the arrival of the guests as an excellent show of hospitality. The miracle (*karāma*) performed in this way shows how it inspires generosity (*karuma*), brings hospitality (*ikram*) to guests, and generates honor for the performers, and serves as an expression of divine grace.

⁸⁸ His ability was likened to that of cattle, who are thought to rely on long distance odor cues for navigating, selecting feed, and mitigating dangers.

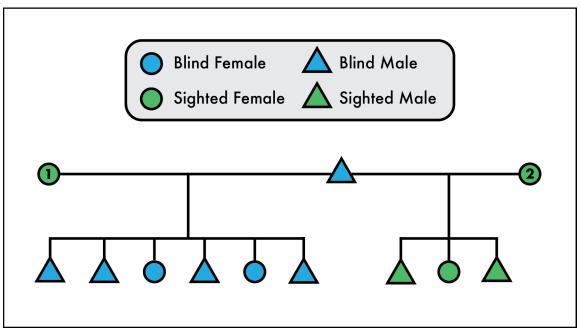
Karāmāt of blind Ummārīs do not always come in the form of a superior sensory capacity. Sometimes, other conditions that might otherwise be identified as "disabilities" are taken as the manifestation of karāma. For example, Muhammad Mahmud told me about his late brother, Shayyakh, who "had another karāma in addition to blindness: he was also paralyzed (*'ajūz*) from the waist down." Since childhood, he had "weakness in his legs." By the time he reached adulthood, he could no longer walk on his own. Villagers fondly remember him by his iconic donkey cart, which he would climb into and skillfully navigate near and far. The karāma in this, Muhammad Mahmud explained, came from the fact that "Shayyakh still lived a full life, married, raised numerous children, maintained his tent, died after living a blessed life, and is buried in Dali Gimba's graveyard."

Another aspect of Shayyakh's karāma aroused much humor and awe. It is said that he could transmit his need $(l-h\bar{a}jja)$ to relieve himself to another person by touch (lams), or even by a glance (nadhar). People who knew him attest to being on the receiving end of this bizarre experience. They say they would come to shake his hand, and then immediately feel the urge to urinate. Moreover, others who lived near him say that he would go weeks without relieving himself. Like the special use of the olfactory sensation, the exercise of this miraculous karāma was a means to preserve one's dignity and honor. Shayyakh's ability to dispense with the need to urinate was powerful because it mitigated the vulnerabilities that stemmed from his immobility. He was able to take care of his own needs without relying on someone to support him and supervise his personal hygiene (*istinja*). Instead, he distributed this need to others through the medium of touch, compelling them to assist him and preserve his honor.

The most famous karāma among the Ummār, however, is the gift of "water divination." Throughout his life, Muhammad Mahmud could locate groundwater hidden under the earth and

discover ideal sites for wells. He was responsible for finding over 1,000 wells in the broader region of Mauritania, Western Sahara, and Mali. Muhammad Mahmud's work as a water diviner gave the Ummār fame and recognition across the country. Chapter Six is dedicated to exploring this practice.

It is important to note that all of these miraculous abilities are practices of perception that proceed through the senses, albeit in an alternative or unconventional way. I classify them as "extraordinary" to recognize that they are alternative, or non-normative ways of using the senses, but they still involve apprehension that proceeds through the bodily senses.



Welcoming or Rejecting the Karāma

Figure VI: Divergence of Blindness and Sightedness

Earlier, we identified the command to "grieve not" issued by the invisible spirit mediator in both the Declaration and the Covenant as a fundamental condition to the fulfillment of the prophecy. In this section, I present one example of how this ethical imperative is framed in the context of the Ummar. One story I heard on numerous occasions indicated that Ummārīs recognize a degree of agency and control regarding the transmission of blindness. Accepting the blindness or refusing it is a choice, but one with consequences:

Have you heard the story of Shayyakh's wife? It's amazing—let me tell it! You have met all of his children, haven't you? He first married Abdullah's mother—She was a righteous woman ($s\bar{a}liha$)—She bore him six children. All of them were blind. You know them. She died in the 80s—before we settled in Dali Gimba. His second wife—the one you've met living in the $mb\bar{a}r$ up on the hill—he didn'St want blind children. The thought of it was unbearable to her. She refused the blindness. Shayyakh obliged. He prayed to Allah to fulfill her request, and they were married. She bore him three children — all sighted. And you see them all in the village today. You know. The sighted children, from the second wife, have no success. They are unmarried and jobless. They stay in the village and don't know how to do anything. On the contrary, in all of Shayyakh's blind children, you see strength (*quwwa*). They have knowledge (*'ilm*).

Theoretically, given the "dominant" pattern of inheritance, blind Ummārīs have a 50% chance of parenting either a blind or sighted child, but sighted Ummārīs will always only parent a sighted child. Given this pattern of inheritance, over generations, the proportion of blind Ummārīs in the family ought to become a smaller proportion in relation to the population of the sighted. However, the actual proportion of blind Ummārīs is influenced by other important factors and contingencies. For one, there is a special value and pressure on blind Ummārīs to have more children and increase the blind population. On the other hand, blind women almost never marry and have children. Bringing these patterns together, blind Ummārīs in the current generation remain just under half of the total population of the family.

Despite the general esteem that many blind Ummārīs enjoy, the mere fact of being impaired is not sufficient to gain admiration, let alone idealization. Ummārīs hold this edict close as moral guidance. As one blind Ummārī explained to me, not all blind people are the same. How could they be? What separates Ummārīs from others is their embrace of blindness as a miracle from Allah, a divine trial, which transforms it into new forms of perception. The Covenant of `Idde, they believe, is subject to certain criteria, and it can be nullified by a refusal to fulfill its basic requirements.

The Question of Compensation

The special sensory capacities of people who are blind from an early age are often understood as "compensations." Two distinct types of compensation are specifically recognized: "sensory compensation," which suggests that the loss of vision is made up for by a stronger sense of hearing or smell; and "extra-sensory compensation," which suggests that a lost physical sensation, such as vision or hearing, is replaced by an immaterial or spiritual perception.

In the West, numerous examples from literature, folktales, and myths suggest that blindness leads to extrasensory perception, or "clairvoyance" (Paulson 198). The blindness of Homer, for example, has been taken as evidence for the inspiration, and the ability to memorize and compose verse, that allowed him to recount an historical past that he himself did not physically witness. In Ancient Greek mythology, Teiresias, the prophet of Apollo in Thebes, was struck blind by the gods, either for revealing their secrets (or for seeing Athena naked), and through the blinding, Teiresias gained a special auditory capacity for understanding the songs of birds. He also acquired the gift of augury.

Studies in psychology, cognitive science, and neuroscience have shown that people with sensory impairments develop alternative ways of using their remaining sensory modes. For example, congenitally blind people develop sensory habits that pay greater attention to nonvisual sensory cues and may develop enhanced psychological schemas for processing alternative sensory information. Neuroscientists further find that these sensory differences are not only behavioral or psychological or learned, but that sensory impairments can also lead to "cross-

modal neuroplastic changes" that restructure neural pathways in the brain and reframe the physical capacities for sensory perception by redistributing the functions of the visual cortex of the brain (Ortiz-Terán et. al., 2016).⁸⁹ For example, neuroimaging studies on "early-blind" people who behaviorally demonstrate an enhanced ability of auditory localization under monaural conditions are shown to recruit occipital areas of the brain that are not used by normal (sighted) people during tasks of auditory localization (Gougoux et. al., 2005).

Another kind of sensory change linked to blindness is related to language processing. Some have found that although the left occipital cortices of the brain normally support basic vision in sighted adults, congenitally blind adults recruit these regions of the brain in tasks of language processing at the level of combinatorial structure, lexical semantics, and phonology (Bedny et. al., 2011). Other neuroscientists have suggested that such a neural redistribution of the visual cortex must play a special functional role because it highly correlates to superior performance in various verbal-memory tasks (Amedi et. al., 2003). These neuroscience findings support the idea that the sensory changes associated with sensory impairment result in extraordinary sensory capacities not possible for sighted adults.

Compensation relies on a logic of loss and gain. It assumes a kind of transference, exchange, or swap that restores an original sense of balance. What blind people lose in vision, they gain in hearing and other senses. The word carries a transactional meaning that projects an equivalence and parity of value between two entities. The whole of one thing paid for by another. The loss of one sense is mitigated by the gain of another.

⁸⁹ Researchers have noted the difficulty of determining whether changes in sensory practices at the behavioral level are the result of cortical plasticity or changes in processing strategies, because the use of different processing strategies alter how a particular sense is used, which induces cerebral reorganization, and inversely, cortical reorganization influences behavioral strategies (Cattaneo and Tomaso 2023, 12).

Compensation is a tempting frame through which to approach sensory impairments like blindness because its logic explains sensory differences by affirming the underlying equality of people. In the end, parity is established, and people with sensory impairments are redeemed as fully sensing humans. However, the notion of compensation precludes the possibility that sensory impairments may provide access to modes of sensory experience that are not commensurate with the idea of a normal body.

Fedwa Malti-Douglass argues that compensation is not found in classical Islamic intellectual traditions. She writes,

In fact, it is so alien to the mental structures governing blindness in Islam that we find the sources fleeing from it, as in the discussions centering around the blindness of Jacob. After his vision is restored, Jacob says to his doubting sons: "Did I not tell you I know from God that you know not?" Referring to knowledge he gained while he was blind. And, yet, no attempt is made to connect physical blindness with spiritual vision. (1989, 226)

In Malti-Douglass's estimation, despite the high prevalence of blind students in Islamic education, "It was not generally assumed that a blind man made a better Qur'an reciter or a poet than a sighted individual" (1989, 228). At the same time, she attributes the prevalence of blind students to the centrality of aurality within Islamic education and Arabic literature. Thus, in her account, she argues that blind students found traditional Islamic pedagogy accessible given its primacy of aurality but denies that blindness provided any kind of special edge for success in these fields of study and professional activity. She does note, however, that the notion of "virility" and blind compensation did have currency in the medieval Islamic world. She writes that,

The geographer and cosmographer al-Qazwīni (d.682/1283), in his 'Ajā'ib almakhlūqāt, notes that the blind individual is the most virile of people, just as the eunuch is the one whose vision is the most correct. And that is because in fact, the two functions, vision and sexuality, represent two opposite but complementary poles: what is missing from one is increased in the other. (1989, 226) All miracles, whether they are karāmat or mu'djizat, are understood as extraordinary actions, abilities, or events that channel divine agency. They are gifts from the divine, objects of divine generosity. They function as signs of spiritual distinction and divine honor.⁹⁰ For prophets, saints, and other believers, they validate the truth of both the messenger and the message.

"Extraordinary Sensory Attunements"

Instead of framing Ummārī blindness in terms of impairment and compensation, I choose to refer to it as a differential "sensory attunement." While ideas of sensory "impairments" and sensory "compensation" are rooted in absolute terms of loss, and pathological abnormality is rooted in the normative sensing human body, the idea of differential sensory "attunements" alludes to divergent ways of being sensory beings. Blind Ummārīs do not see less, nor are they removed from the visual realm in any way. Fundamentally, their blindness is not a loss, but a gift, a karāma, that they were selected to received. Some of the blind among them possess limited residual vision, but they use it in non-normative ways. Moreover, they employ their non-visual senses differently and have sensory capacities that exceed the abilities of the normative human body.

Their unique "sensory attunements" could be seen as a kind of "neurodiversity," which is a term related to the idea that "people experience and interact with the world around them in many different ways; there is no one 'right' way of thinking, learning, and behaving, and differences are not viewed as deficits" (Baumer and Frueh 2021).

⁹⁰In this work, I draw upon the tripartite model of the sign defined by Charles Sanders Peirce (1955). In this model, a sign is something that signifies something to someone, either iconically (through mimesis), indexically (causally or contingently), or symbolically. Using this tripartite model of the sign rather than the dualistic Saussurean sign emphasizes the role of the interpretant or observer in the process of signification. Signs do not just rely on a relationship between them and their signified meanings, in a commonly understood dictionary of meaning, but their ability to signify crucially depends on the perspective of the interpreter of the sign.

The term attunement is also fitting to describe the sensory dispositions of blind persons because of its auditory connotations. Musical instruments can be tuned in different ways, to produce different kinds of music. Differential sensory attunements may be the result of biological and neuroplastic changes, as well as alternative bodily habits of sensory perception, patterns of attention, and strategies to perceive the world. Instead of focusing on how blindness delimits and disables ordinary ways of engaging in the world, paying attention to the sensory attunements of blind people shifts the scope of analysis from examining compensatory strategies and brings attention to how the blind perceive, interpret, and interact using all of their senses. Studies of neuroplastic changes in people with sensory impairments show that these changes can generate entirely different sensory pathways and possibilities that are not realized in normative sensory arrangements. These findings support the notion that the sensory differences caused by impairment do not result in an equivalence or restoration of the normative sensory body.

Outsiders often describe the karāmāt of the Ummār as examples of compensation, but Muhammad Mahmud staunchly refuted these claims. He contended that blindness, whether Ummārī or of a different kind, was neither sufficient nor necessary to receive a karāma. He reasoned that there were numerous blind people around the world who found little or no tangible benefit in their blindness. And just as well, all the various karāmat possessed by the Ummār could be acquired by sighted people just as well, by the grace of God.

Therefore, in his opinion, the karamāt were not a compensation for the blindness. Rather, blindness serves as the sign and medium of the karāma, which also became manifest in other forms such as charisma and honor. For him, the covenant of Idde affirms that Ummāri blindness is exceptional because it is a gift from God. It is a specific kind of karāma, as it fulfills necessary conditions, such as prophecy and privileged descent within the Ummār.

Geneticization of Ummārī Blindness

In 2017, Mouna Hadrami, a PhD student in biostatistics and epidemiology at the University of Nouakchott, led a team of eye specialists and biologists from Nouakchott to conduct a genomic research project on the Ummar. The project was one part of her broader dissertation research work on genetic diseases of the eye in Mauritania. In Dali Gimba, the team administered genealogical surveys, clinical exams, and took 47 vials of blood from various families. They returned to Nouakchott after one day in the village. The samples were sent to Europe for analysis, and in 2018, the results were published in the *European Journal of Ophthalmology*.

A few critical ideas emerged from the research project: Firstly, it (re)defined the origin of Ummārī blindness as a *mutation*. Specifically, it stated that the cause of Ummārī blindness is a missense mutation in the DNA of affected individuals, through the substitution of an adenine for a cytosine base at position 166 of the GJA8 gene, which is responsible for the structure and clarity of fiber cells of the ocular lens (Hadrami et. al. 2018). This mutation results in a congenital nuclear cataract that causes the condition of blindness.

Furthermore, the study determined two additional facts about the transmission of the mutation: first, that it is *autosomal*, meaning that the genetic mutation is located on an autosomal region of the DNA, and thus is not sex-linked; and second, that it follows a *dominant* pattern of transmission, which means that only one pair of the mutation is needed for blindness to manifest phenotypically. This implies that blindness is not a result of endogamy.

Finally, the study classified Ummārī blindness as *curable*. Because the etiology of blindness is a congenital cataract, researchers advised that a simple cataract surgery before the

age of two would cure an affected individual of their blindness. Not only is the blindness curable,

but the researchers-turned-activists declared that Ummārī blindness must be cured.

In an interview I conducted with her, Hadrami explained how she believes her work

successfully rewrites the Covenant of Idde and debunks the notion of any karāma among the

Ummar:

- MH They have a myth [*khurafā*], that their eighth ancestor, who was the first one who was afflicted by this—or ninth—There is discrepancy on this. This ancestor, they say that when he was in the womb of his mother—I don't know—a righteous man (*salih*) came to her, and said, this son you have with you will have inner sight (*başira*).
- MH —I told them! This ancestor of yours was afflicted by none other than a genetic mutation (*tafra wirāthiyya*)![laughing]. This is the day that the mutation was discovered!
- Me So—you don't believe that they have karamāt?
- MH They don't have anything! They are like the rest of people. Saints $(awliy\bar{a})$ exist sure--but I take the perspective of logic, not the perspective of folktales [*khurufāt*]. After the Prophet, peace and blessings be upon him, there are no infallible people. This is what we submit to.
- MH These people are humans. There is no difference between us and them. The only thing is that they are blind [$`um\bar{\imath}$]. And blind people always, their [sensory] focus is stronger than the sighted. Because their brains are not busy with anything, so it's possible for them to focus it greatly. So, minerals exist in the water, and they are able to sense them. It is through the senses that they can detect the water, not through something spiritual.

Hadrami frames her opinion on the karāma in a modernist rationalist understanding of

religion that denies the possibility of miracles, at least in the contemporary post-Muhammadan

world. She casts doubt on the Covenant of Idde and dismisses it as a fictional myth. Moreover,

she claims that the miraculous abilities of blind Ummārīs (like water divination) are actually

forms of sensory compensation that develop as a consequence of blindness. This

acknowledgement of alternative sensory abilities, however, is overshadowed in her subsequent

statement that denies any difference between the sighted and the blind except for their blindness.

When Hadrami called Dali Gimba to tell them of her results, however, "they refused the diagnosis *and* the treatment." In her opinion, the reason why villagers reacted this way was because of their belief in the Covenant of Idde. In response to this refusal, Hadrami doubled down in her advocacy for the treatment. She criticized the villagers' refusal as a "violation of human rights," child abuse, and oppression against women of the village, and told me that she was in the process of filing a formal complaint against the villagers with the United Nations. She even went so far as to suggest coercing villagers into treatment:

This is why I want to talk about it in news programs. I want the state to take on this responsibility. That they can take them and see that the treatment is forced because it is necessary. We *will* cure them all. We *are* capable of eliminating this blindness entirely, *Subhan Allah*.

For Hadrami, the refusal of the surgery shifted the meaning of blindness from the ordinary sense of "the inability to see" to the adjacent symbolic association of the "refusal to see." This sense of the word is evoked in common symbolic representations of blindness such as "blind following," or in the racial ideology of "colorblindness," where the refusal to see or acknowledge racial difference is promoted as a means of eliminating racial discrimination. Hadrami's assertion that blindness was "curable" shifted the agency from natural causes to the families of blind Ummārīs.

Although Mouna Hadrami stated that the villagers refused the diagnosis and the treatment, in reality the responses from villagers were diverse. Generally speaking, however, most villagers did not care much about the test results or Hadrami's claims. When I offered to translate her article, they were uninterested.

Autosomal Transmission

Hadrami's findings challenged the local genealogical model that holds that blindness among the Ummār is sex-linked. According to villagers, this understanding is not only based on their understanding of the genealogical transmission of sensory capacities through patrilineal inheritance, but it is consistent with what they see empirically in the village. Although many villagers challenged Hadrami's view and cited the case of Taytā as proof (see Figure V), several theoretically acknowledged the possibility of female transmission of the blindness. Although the system of gendered transmission is part of the telling of the Covenant of Idde, at least in Muhammad Mahmud's version, this was not a point that these villagers felt compelled to emphasize. Most grant its possibility but doubt that it is necessarily true. Two villagers told me that they believe Hadrami is likely correct, but that the issue cannot be proven and irrelevant because no one is interested in marrying blind Ummārī women.

Genetic Dominance

Hadrami told me that the finding that Ummārī blindness is in fact dominant is crucial because it proves that blindness among the Ummār is not a result of endogamy. She told me that she has found many recessive genetic disorders in Mauritania that are the result of "in-breeding," but finding that Ummārī blindness is dominant exonerated them from this type of blame. A few tabloid-styled news articles on Dali Gimba had raised the suspicion of this possibility; however, with her publication, she believed that these rumors could be proven objectively to be false.

Despite its purported political and representational value, I found that Dali Gimbans are entirely uninterested in this biomedical study. They already know that the transmission of blindness does not depend on whom a blind person marries. Moreover, except for one marriage in recent history, villagers told me that members of the Awlād Ummār never marry other members of the Awlād Ummar.

Curability

Villagers respond to the question of curability in a variety of ways. Overwhelmingly, most villagers in Dali Gimba deny the possibility of curability. Some point to the case of Alboo, a young boy who underwent cataract surgery years earlier but remained "blind." Debates over this case are explored further in Chapter Five. Others say that the blindness is a congenital condition, something inherited by blood, and a surgical operation cannot change this.

Muhammad Mahmud, however, was open to the idea of curability and invited the opportunity. In his view, blindness is only a sign of the Ummārī karāma, not identical to it. If the blindness was cured, this would not imply that the karāma had been removed. In his estimation, karāma is a gift from Allah, and Allah is not bound in any way. A surgery in no way interdicts the flow of divine grace. Just as Allah has given them the karāma with the blindness, so too could he give them the karāma without the blindness. A number of sighted villagers also hold this optimistic view of surgical treatment. Muhammad Mahmud recognized that the majority of his kinfolk disagreed with his view on the curability of the blindness, but he respected their opinions and unconcerned with convincing them to submit to the surgery as Hadrami would have liked.

Villagers have numerous other reasons to reject the surgery. For one, they are fearful of submitting their infants to surgery in Nouakchott. Infant mortality in the village is considerable, and mistrust in medical authority is high, especially following the genomic research project. To many, the invitation to surgically treat the blindness is offensive. To them, the karāma is a gift from Allah, and to rehabilitate it is an example of "grieving." They want their children to acquire the karāma, to possess charisma, serve as leaders of the family, and have extraordinary sensory attunements.

Blindness is transmitted through the blood. Surgery, even if it is legitimately possible, does not change the fundamental constitution of the blood that carried blindness. Blind Ummārīs who underwent the surgery would still be carriers, and thus could not actually serve to eradicate the condition as Hadrami suggests. Villagers also question whether the surgery would restore vision and "give them back a normal and natural life," as Hadrami claims. Would a blind Ummārī who undergoes surgery really be equal to a sighted Ummāri?⁹¹

Hadrami's advocacy for the surgery fails to understand the critical role of blindness in Ummārī notions of personhood and identity. What effect would the surgery have on the social and kin relationships of an individual? Blindness among the Ummar mediates participation in a privileged genealogy within the kinship structure of the family. The prospect of curing blindness threatens blind Ummārīs with an ego death, and a denial, rejection, or displacement of a central source of social location. Blind Ummārīs are proud of their extraordinary sensory abilities, and grateful for the various forms of social capital that blindness offers, which are also interpreted as benefits to the community at large.

Hadrami's approach is an example of the kind of expanding medical surveillance Abby Lippman calls "geneticization," whereby differences between individuals are reduced to their DNA codes (1998). Similarly, Margaret Lock has challenged the perversity of models that "essentialize, racialize, dehistoricize, and depoliticize biological variation" (2012, 131). Contrary to Hadrami's claim that the only difference between blind Ummārīs and the sighted is blindness, in reality a whole range of differences emerge at precisely this juncture.

Although Hadrami believes that her research successfully rewrites the Covenant of Idde, villagers do not interpret her results in this way. For them, the de novo mutation that Hadrami

⁹¹ Similarly, advocates from the Deaf community have questioned the notion that cochlear implantation can make a deaf person "hearing," and many have criticized the practice as a form of "cultural genocide" (Sparrow 2005).

located in their genome is easily assimilated to the Covenant story, although instead of some natural entropic force, for Ummārīs it is Allah who gifted this condition to the bloodline. Some elements of the Covenant are being reinterpreted in response to the medical counternarrative, such as certainty in the model of gendered transmission.

Chapter Four: The Sensory World of the Saharan Bādiya

We made the night and the day as two signs. We have darkened the sign of the night and We have made the sign of the day bright so that you may seek a favor from your Lord and so that you may know the number of years and the computation. And everything We have detailed with a complete detailing. (Qur'an 17:12)

Blindness, often represented as an absolute frame of experience, is, in reality, a contextdependent phenomenon. It manifests within the intricate interplay of sensory experiences as a relational category constructed in conjunction with the idea of sightedness experienced in a particular shared context. Sensory perceptions are not solely influenced by local social customs and cultural beliefs but are also profoundly shaped by the tangible qualities of the environment itself. The material qualities of local environments can delimit certain ways of sensorial engagement. Local environments give rise to distinct sensoriums, or sensory worlds, which become the stages for humans and more-than-human interactions. As demonstrated by Nancy Munn (1986), different environmental niches, such as the sea or the land, engender diverse sensory perceptions—wetness or dryness, buoyancy or swiftness—thereby influencing their cultural significance and symbolic interpretations. Furthermore, the built structures within these environments facilitate the exercise of specific senses, thus molding the cultural habits of sensory perception within the community.

Before we delve into understanding blind alterity, or "what difference blindness makes" in Dali Gimba, which is the focus of a subsequent chapter, it is imperative to first comprehend the local sensory worlds of the Saharan hinterland. In what sensory world is one blind? In relation to what possibilities of sight and sightedness? This chapter begins *in medias res* ("in the midst of things") and centers its attention on the sensory rhythms of everyday and every*night* life in the Saharan *bādiya*, or "hinterland." This expository and ethnographic exercise does not aim to provide an exhaustive account of the range of sensory experiences that appear in the bādiya world. Instead, its purpose is to spotlight select sensory encounters and their local significance to acquaint readers with the feel of this social world.

This chapter unfolds in several sections, each designed to shed light on a different facet of the Saharan bādiya sensory landscape. I begin by defining the "Saharan bādiya," exploring its history as a realm of pastoral nomadism and its recent transformations in the past few decades into a "sedentary" hinterland characterized by village networks that retain traces of nomadic traditions. Secondly, I portray the ever-changing sensory landscape from night to day within the Saharan space. In this section, I offer textured descriptions of the intricate soundscapes and the presence of multiple "darknesses" that characterize the nighttime environment and consider the social practice of "dismounting" during the evening, which produces transient domestic spaces. I also focus on the role of the Saharan sun and examine how its movements influence the qualities of brightness, color, and heat and shape the sensory experiences of life in the badiya. Next, I explore how the materiality of wind, rain, and sand create seasonal conditions that affect the bodies of badiya dwellers, their sensory capabilities, and inform their sense of spatial orientation. Lastly, I examine how the sensory world also consists of "invisible" domains of experience that are inhabited by agentive and consequential spirits such as angels, jinns, and the souls of the dead. These social actors are hidden from ordinary forms of human vision but remain observable and sensible through alternative means. These descriptions of the Saharan sensory world are presented to show how environmental conditions delimit the possibilities of vision, produce

various "blinding" conditions, destabilize identities of sightedness, and correspond to emphases on multi-sensory ways of knowing and engaging with the world.

A Note on Method in Sensory Research

While sensory practices are often described as biological processes, how people pay attention, cognitively process, and interpret their sensory worlds are fundamentally shaped by social, cultural, and linguistic factors.⁹² Although recent trends in ethnographic research on the senses have increasingly drawn upon immersive first-hand observations of local environments as well as reflexive and phenomenological methods, such approaches routinely fall short of representing local ways of experiencing these diverse sensory worlds. As David Howes, a pioneer in the field of the anthropology of the senses, cautions, such approaches tend to undermine the "cultural importance and authority of indigenous models of perception," further writing that "by universalising the subjective sensations of the individual, phenomenology ignores the extent to which perception is a cultural construct. Culturally informed practices that differ from one's own are inaccessible from a purely phenomenological perspective" (Howes 2005, 335).

Moreover, researchers relying only on their own bodily experiences might learn to pay attention to the sensory world in new ways but may still fail to truly perceive the senses of the cultural other, because individual sensory capacities are molded by cultural habituation at the level of cognitive and biological structure, including neuroplastic changes that make it impossible to fully acquire or mimic local processes of sensory perception. As Howes writes, "If one has grown up in a society in which the sense of smell is little valued or trained, one cannot

⁹² See Basso (1996) for a classic approach to this rich type of ethnography.

hope to suddenly be able to perceive all the complex olfactory nuances of another society simply because one has entered into another sensory and social environment" (2003, 49). Several examples presented in this chapter showcase occasions when my own sensory and perceptive practices failed to perceive or interpret the signifiers that locals found to be meaningful and salient. These encounters served as important points that revealed critical elements of the local ways of sensing the sensory environment.

Although scholars may find phenomenological approaches suitable for conducting ethnography in contemporary hot spots of anthropological work in metropolitan places and spaces where differences between sensory ideologies of the researcher and locals may be more comfortably elided, when conducting sensory research in a setting such as the Mauritanian hinterland, the assumptions of some kind of primal or pre-reflective unity of the senses cannot be taken for granted. In contexts such as these especially, analysis must go beyond surface-level observations and include an in-depth examination of the social significance of such qualities. In this chapter, I take guidance from local discourses and narratives to contextualize local ways of attending to the sensory world with respect to local sensory ideologies.

What is the Saharan Bādiya?

In Mauritania today, the term bādiya, is commonly used to refer to village networks and the surrounding hinterland region of the country. In Arabic, the word bādiya comes from a root that generally refers to the life of nomadic pastoralism. The lexeme also gives rise to the related word *bedū*, which refers to people who practice nomadism, but also has now become a commonly recognized ethnonym in English as *bedouin* that specifically refers to the Arabicspeaking involved in nomadic pastoral production who "persist in multiple and changing ways in all seventeen Arab states in Southwest Asia and North Africa and in Palestine/Israel" (Cole

2003, 236). Nomadic pastoralism lies at the heart of Arab identity and heritage, and it is suggested that the word '*arāb* originally meant, "people of the tent" (Feiberg 1944, 44). Bādiya is a spatial construction of the lexeme that denotes the space of pastoral nomadism and is used to refer to the desert where nomadic people dwell. It is a geographic designation that corresponds to a type of civilization, that of *badāwa*, constructed in opposition to spaces of sedentary social life (*hadara*), rooted in places like towns and cities (*mudun*), constituting a social antithesis that was famously described by Ibn Khaldun. In this work, I translate the bādiya as the "hinterland."

The southern Sahara is an ecoregion that has long been home to people who practiced nomadic pastoralism.⁹³ The mode of subsistence is said to have first been established in the Saharan West with the arrival of Sanhadja and Znaga Berber tribes who migrated from northern Africa in the 11th century and displaced sedentary Bafours and Mandé groups of agriculturalists, farmers, and fishermen who had lived in the region (Ross 2011, Pettigrew 2019). The social practice of nomadism continued with the arrival of the Bani Hassān tribes in the 14th century and social transformations associated with their rising military and political dominance of the region starting in the 16th century. Through this historical process, Saharan practices of pastoral nomadism were Arabized and grafted onto an Arabian genealogy of Bedouin nomadism.

The Sahara takes its name from the Arabic word "Ṣaḥrā'," which is used to refer to any desert environment, and the sensory qualities of spaces that are fawn colored. In the Hodh region of the Saharan West, there are three main seasons: the *shitā* (winter), the *sayf* (summer), and the

⁹³ Other regions where pastoral nomads have historically taken root are the Arabian Peninsula, the Eurasian steppe, the horn of Africa, Northern Europe, and Siberia. Ecologists and economists often characterize nomadism as an adaptive strategy or an ideal mode of production to take advantage of the harsh and unpredictable environments such as steppes and deserts. To note, Saharans were quick to remind me that functionalist explanations for nomadism failed to account for the love that desert dwellers have for their animals, their passion for the itinerant lifestyle, and the ethical and aesthetic value of such a lifestyle. As Marshall Sahlins argued in his seminal book, *Stone Age Economics*, the economic systems of pre-modern societies were shaped by cultural values and social structures of those societies and cannot solely be understood in terms of material production and exchange (1972).

kharīf (rainy season). Nomadic patterns of movement in the Saharan West were fundamentally guided by the search for better pastures based on these seasons. At some point during the winter season (October - February), *khayām* (families/tents) would pack their belongings onto their steeds and join various *rafageh* (caravans) heading southward. Caravans would spend the summer months (March - June) in these regions "descending" (*tanzīl*) in proximity to wells in these southern regions (Prussin 1995: 39). Here, nomads stayed for days or weeks at a time where they lived under the hospitality of sedentary agriculturalists and traded with people who lived there more permanently. Caravans would return to areas in the north, to their "homelands" (*wațan*) to spend the kharīf rainy season (July - September), where intermittent bouts of torrential rainfall enliven the landscape, caused by water collection in seasonal watercourses (*daye*') and a "greening" (*ikhdarra*) of the bādiya landscape through the growth of grass.

Village Spaces as Bādiya

Over the past fifty years, Mauritania has witnessed significant changes due to factors such as recurrent droughts, deforestation, locust swarms, and other changing political and economic conditions. Census data reveals a dramatic decline in the pastoral nomad population, from as high as 75% or 90% in the 1960s, down to 12% by 1988, 5% by 2000, and 1.2% by 2013 (Panzzanita 2008: 370; ONS 2013). Social researchers have drawn attention to how this transition has manifested as urbanization, particularly with the rapid expansion of cities like Nouakchott (Taine-Cheikh 2007; Boulay 2004). Less attention has been paid to how this process of sedenterization manifested as village formation in hinterland spaces. Especially in the 1980s, new kinds of settlements and village networks were established in areas between the former nomadic homelands in the north and the winter and summer destinations located in areas southward.

Although nomadic pastoralism has been abandoned by all except for a marginal population, the region continues to be called the bādiya by both its inhabitants as well as citydwellers.⁹⁴ While many people from Nouakchott may refer to the entire interior of the country as the bādiya, however, some exclude major interior towns such as Kiffa or Atar from its domain. Among French-speaking Mauritanians, bādiya is translated as *la brousse* ("the bush"), as the space signifies a humanized social space that was traditionally occupied by the space of camps, pastures, and herds. The bādiya also does not include wilderness spaces excluded from human traffic. Such places are instead referred to as *khalawa* (empty) or *sahra* (desert) spaces (Boulay 2005, 147). In the contemporary day, the term bādiya is no longer bound to its original literal sense of being a space of nomadism, and people who live in the bādiya have largely formally adopted sedentary life. However, the bādiya remains a spatial and civilizational counter-space in relation to metropolitan and urban spaces. This spatial division corresponds to alternative sensory worlds and sensory ideologies.

The division of social space between the domain of badāwa and the domain of hadāra in the Saharan West is further reflected in a linguistic schism within the Hassaniyya dialect of Arabic. Taine-Cheikh observes how "urban Hassaniyya" spoken in places like Nouakchott has increasingly diverged from forms of "bush Hassaniyya" spoken in the bādiya as the rhythms of everyday life and relevant lexical fields in these two social spaces drift from one another and face differential sociolinguistic and political influences (Taine-Cheikh 2007).

Although many denizens of Nouakchott imagine the bādiya as a space isolated from the affairs of the capital, the world, and values of modernity, and may even treat its inhabitants with contempt, the bādiya continues to be imagined as a source of cultural heritage, social integrity,

⁹⁴ In 2004, an estimated 6% of Moorish (*bīdhān*) families were thought to lead a nomadic lifestyle (Boulay 2004, 4).

and historical provenance. This sentiment is particularly evident in practices of "neo-bedoinism" which have emerged since the 1990s whereby bīdhān city-dwellers from Nouakchott seek to revive the memory of bādiya life by constructing tents on the roof of their city houses, or by spending weeks or months of the kharīf with their families in pseudo-bādiya spaces built just outside the limits of the city. This simulacrum of the bādiya critically depends on recreating the quintessential sensory qualities of the bādiya. In his analysis of the social practice, Sebastian Boulay writes that its attempted recreation of the Bedouin atmosphere depends on capturing the essential sensory qualities of the badiya, particularly around three central elements: "the green desert, the abundance of milk and fat cattle, and finally, the tent" (Boulay 2004, 10).

Residents of the bādiya often see their environment as one of abundance, especially when compared to Nouakchott or urban areas in the West. For example, interlocuters in the bādiya often felt pity for me when I told them I came from America, which they immediately connected to "Flint," a place they knew as having water that was dangerously polluted by the government. They take pride in the bādiya's health-restoring winds,⁹⁵ its vast open spaces, and, during the kḥarif, they celebrate the availability of fresh, gamey milk, abundant "sweet" groundwater,⁹⁶ and plentiful rainfall.

Nomadic Habits in Village Life

With the formal decline of nomadic modes of pastoralist subsistence, subsequent generations of Mauritanians in the hinterlands have grown up in villages. However, village life

⁹⁵ The bādiya has long been seen as a space of "good air," in contrast to "bad air" that especially plagues cities during a pandemic. One of the reasons that the Prophet Muhammad was sent from his birthplace in Mekka to live with foster parents in the Arabian bādiya during his childhood was to distance him from an epidemic believed to be caused by the bad air of the city. Similarly, during the COVID-19 pandemic, people living in the bādiya cited their availability of good air as a primary factor that prevented them from being affected by the pandemic.

⁹⁶ Because of factors such as the coastal location of Nouakchott and Nouadhibou, drought, anthropization, the overexploitation of groundwater resources, and erosion, aquifers in the region have experienced processes of saltwater intrusion and increasing salinity of groundwater (Mohammad et al 2020).

continues to embrace a distinct sense of mobility that renders it different than other spaces of "settled" life that depend on stasis and permanence. Despite the formal shift away from nomadic modes of pastoralist subsistence, daily life in these spaces continue to be marked by familiar qualities of the bādiya such as seasonal and daily mobility, bodily immersion in "natural" landscapes, physical contact with animals, semi-permanent architecture, and daily labor such as water fetching.



Figure VII: Mbārs in Dali Gimba

This photo was taken looking in the southwest (gibla-sahel) direction. It depicts one mbār in the foreground with a pair of men walking adjacent to it. The background shows the boundary of the compound, enclosed by an animal fencing made of tree branches and wires. Beyond this, the background contains several other mbars in the distance. Photo by Saquib Usman

In the Hodh region of the bādiya, the site of domestic life shifted from the traditional

nomadic tent (khayma) to the more permanent structures, such as the dār, which is single-room

mudbrick house, and the *mbār*, which is a common house architecture in the Sahelian region.⁹⁷

⁹⁷ The mbār is originally drawn from a Wolof vernacular architecture long used by sedentary peoples in the region. Note also that the description expressed here is specific to the Hodh region (Pettigrew 2023b). The Saharan West is divided between ecoregions described as being Saharan, and others that are described as being Sahelian. The Hodh is Sahelian, and its vernacular architectures differ from those found in other sub-regions to the north that are Saharan, rely upon a different economy, and have a distinct history. For example, you will not find camels in this depiction of the local sensory world. Instead of camels, the Hodh is known for its cattle breeding.

The mbār is a rectangular gabled building consisting of a steeply sloped roof anchored to the ground with several supporting beams. In its simplest form, its pillars are built from sturdy tree trunks dug into the ground, with tree branches and palm fibers used for its rafters, trusses, and roofing. A thick fabric (*idfa*) wraps around all four sides and can be tucked away under the roof to allow for cooling wind to pass through or unfurled to provide shade or to prevent cold wind from penetrating the edifice on bitter winter nights. Like the khayma, its open walls facilitate panoramic views of the horizon. Its pyramidal design and use of central and lateral ridgepoles mirrors the form of the nomadic tent and configures it to similarly produce a domestic space that shapes and is shaped by gender, marital, kin, and other kinds of social relationships in the community.⁹⁸ Advanced mbārs may be built on a raised concrete platform (*dass*) instead of directly on the earth, use pillars made of reinforced concrete, have roofs built from sheets of corrugated metal, and feature curtains made of plastic-coated fabric. Some mbārs are also wrapped with a chain-linked mesh and have doors fitted on two or more sides.

These vernacular architectures of the village retain nomadic features due to their impermanence and because they continue to facilitate forms of mobility. Simple mbārs can be disassembled and relocated with the assistance of multiple individuals. Dars are often razed, relocated, and rebuilt. Locals continuously modify their built environments, contributing to a dynamic and ever-changing sense of place and settlement in everyday life.

Even in more fixed and permanent structures, both villagers and objects maintain a dynamic and mobile relationship with the spaces mediated by these buildings. For instance, during nomadic times, families would store their total belongings in easily portable containers such as luggage racks which doubled as the palaquin of the camel or large leather bags. Today,

⁹⁸ Boulay, for example, observes that traditionally, the khayma produced a gendered space. The sahel (northern) direction of the tent represents a feminine space, while the sharg (southern) side of the tent contained a masculine identity (Boulay 2003, 145).

villagers in Dali Gimba often continue to utilize portable containers, such as plastic suitcases commonly referred to as "samsunīt" (Boulay 145) to store clothing and other personal and communal belongings such as paper documents, cash, or medicines. The placement of these containers, and other objects of cookware, gas stoves, raised bed frames were subject to frequent rearrangement.⁹⁹ This constant movement within and around homes contributes to a unique sensory experience of domestic life, distinguishing it from more static forms of 'settled' living.

Alternation of the Night and Day in the Sahara

In the Saharan *bādiya*, the experience of space and time is profoundly shaped by the sensory contrast between the night and the day. Ecological characteristics of the desert (such low cloud cover, low humidity, the dryness of its sandy soil, high thermal emissivity, high particulate pollution) create an environment that undergoes dramatic diurnal fluctuations between the day and night. Deserts are known for their extreme changes in temperatures between scorching hot days and frigid nights. This rhythm foregrounds patterns of everyday life that actively respond to the stark contrast in these alternating temporal domains of the landscape, atmosphere, and social activities. Bādiya dwellers in Dali Gimba were especially cognizant of this feature of everyday life, which they called "the interchanging of night and day" (*ikh'tilāfi al-layli wa-naharī*). They notice it often and express amazement on its polarity and associated notions of contrast, antithesis and pairing. This classical Arabic phrasing comes from a verse of the Qur'an, "*Indeed, in the creation of the heavens and the earth and the alternation of the day and night are signs for people of reason*" (3:190).

⁹⁹ This habit of spatial arrangement in relation to blind ways of attuning to the world, and especially in relation to the experience of "oscillopsia," caused by nystagmoid vision which is further explored in Chapter Five.

The Adhān as Aural Marker of Time

As in any "Muslim" land, the passage of time in the Dali Gimba is not only made sensible by the movements of the sun, but also marked by the regular audition of the *adhān*. The *muadhhin*'s call to prayer reverberates from the masjid's loudspeaker through the village space at specific times that directly correspond to changes in sensorial features of the environment through the movements of the sun and the passing of time. The adhān functions as a public aural sign that demarcates the phases of the day and serves as an important marker of organizing social activities.

In jurisprudential discourse, the act of ritual prayer (*şalaḥ*) is found to become incumbent (*wājib*) when a Muslim witnesses the passage of the time—especially through responding to periodic movements of the sun and light in the atmosphere. The times of prayer are described through a sensorially rich accounting of the passing of quotidian time and its various divisions and names in *al-Risālah* of Ibn Abu Zayd al-Qayrawānī (d. 922), which is a basic Malikī fiqh primer that is widely memorized in Mauritania:

"The Times of The Prayers and Their Names"

According to the people of Madinah "the middle prayer" (2:238) is the early morning prayer, namely the dawn prayer. The beginning of the time for this prayer is when dawn breaks and the light spreads out in the extreme east, going from the qiblah to behind the qiblah, until it rises up and fills the whole horizon. The end of its time is when the light has got very bright so that someone ending the prayer says the *salām* just as the edge of the sun appears over the horizon. Any time between these two points is acceptable but the beginning of the time is the best.

The time of Zuhr is from when the sun has passed the zenith, and that is when the shadows start to get longer. It is recommended to delay the prayer in summer until the shadow of an object reaches a quarter of the length of that object added to the length of its shadow at noon. It is also said that this practice is only recommended for mosques so that more people can catch the prayer, and that it is better for a man praying by himself to do the prayer at the beginning of the time. It is also said that, when the heat is fierce, it is better to delay the prayer until it is a little cooler even if you are praying by yourself, since the Prophet \cong said, "Delay the prayer until it gets a little cooler because the

fierceness of the heat is from the flames of Hell." The end of the time of *Dhuhr* is when the shadow of an object is the same length as that object in addition to the length of its shadow at noon.

The beginning of the time of 'Asr is the end of the time of *Dhuhr* and its end is when the shadow of an object is twice the length of hat object in addition to the length of its shadow at noon. It is also said that if, standing upright facing the sun with your eyes looking straight ahead, you can see the sun, then the time of 'Asr has arrived. If you cannot see the sun the time has not yet begun. If the sun has descended right into your field of vision, then you are well into the rime. According to Malik, the time for 'Asr lasts until the sun begins to turn yellow.

The time of *Maghrib*—also known as the prayer of the resident, in that a traveller does not shorten it but prays it in the same way as someone who is resident - is at sunset. When the sun has completely disappeared below the horizon, the prayer is due and it should not be delayed. This moment is the time for this prayer and it should not be delayed beyond it.

The time of the prayer of *al-'atamah* (darkness) or '*Ishā*', the latter being the better name for it, is when the redness remaining in the sky from the remaining rays of the sun after sunset has disappeared. When all yellowness and redness are gone, the time of the ''*Ishā*'' prayer has arrived. No attention need be paid to any whiteness that may remain on the western horizon. The time for '*Ishā*' extends from this time until a third of the night has passed for those who want to delay doing it because of working or some other good reason. It is better to do it as early as possible although there is no harm in delaying it a little in mosques to allow time for people to gather. Sleeping before praying '*Ishā*'' is disliked, as is talking after it, unless there is a good reason for doing so. (Al Qayrawani 2018, 26-27)

The passage from al-Qayrawanī's text emphasizes the significance of visual cues such as

color, the position of the sun and shadows in determining the times for prayer. It also reflects an

understanding of quotidian time that begins with the night, places dawn at its middle, and the

daytime at the end.

While most contemporary Muslim communities now rely on calculated prayer times, in this bādiya context, the determination of prayer times remains closely tied to the sensory qualities of the day and night. Although villagers certainly had access to timetables and kept track of time through their phones, the sensory qualities of the day continued to be primary. The descriptions and interpretations of environmental qualities found in fiqh manuals like AlQayrawani's quoted above resonate with the daily experiences of those living in the Sahara. For them, the text offered jurisprudencial information about the divisions of the day through descriptions of familiar sensory practices such as keeping track of the sun's movements and observing the polar rhythms of the sensory environment in the Sahara. Sensorial acts of observing the environment were linked with the religious act of the ritual prayer, and therefore linked with establishing contact with the divine.¹⁰⁰

Following in the custom of the Sahara, and what is articulated in the Qur'an,¹⁰¹ and al-Qayrawāni's text, I begin my accounting of quotidian time with the night. The ongoing rhythm of nomadic movement in the present-day bādiya is evident in the nightly reproduction of the domestic space every evening.

Descending for the Night

While more permanent built architectures such as the mbār and the dār in village life have functionally reduced the need to constantly reconstruct tents, spatial domains of domestic and marital life continue to be assembled and disassembled with to the alteration of night and day. Each evening, families select a spot to occupy for the night. They usually prefer a location outside, under the night's sky, perhaps adjacent to an mbār or elsewhere within the compound (*manzil*). Dārs are typically less favorable because they retain daytime heat within its walls

¹⁰⁰ American Islamic scholar Hamza Yusuf reaffirms this legal principle of privileging sensorial acts of observing and noticing the passing of time in his attack of astronomical calculation of the lunar calendar (or what he calls "Cesarean Moon Births"), and support for the ritual practice of moon sighting:

All of the acts of ritualized worship incumbent upon Muslims are related to time, and thus the measurement and the detailing of time's passage is a religious duty. According to 'Abd al-Hayy al-Kattānī, maintaining time is a religious position for which the Prophet is himself appointed certain people in Medina to hold. Islamic law considers sacred timekeeping (tawqīt) a communal obligation, so once someone in a community fulfills this duty, the rest of the community is relieved of it. Not only is it an act of worship to monitor the sun and the moon's courses for prayer times and for the other acts of worship contingent upon certain months, but, according to the Prophet is is one of the most pleasing and beloved acts to God. The Prophet is, said, "The most beloved of God's servants to God are those who monitor the sun and moon, engendering love of God in God's servants and love of God's servants in God." (Hanson 2006, 10)

¹⁰¹ The Qur'an frequently mentions the pair of night and day, but always mentions the night before it mentions the day.

which make them uncomfortable to dwell in well into the night. Villagers may however opt to sleep inside dārs or mbārs with curtains drawn down on cold winter nights, or during sandstorms or torrential rainfall in the kharif. When evening approaches, rugs are unrolled and delineate a location for sitting and laying to occupy for the night. Thick blankets known as are retrieved from storage, unfolded, and spread out, and pillows are thrown on top. These objects are treated as personal and intimate objects and are not meant to be shared. A smaller pitcher of water (*makriej*) may be filled and brought nearby so water does not need to be fetched from the local water storage tent (*chihlīh*) in the middle of the night. This process of setting up for the night is called "descending" (*nuzul*) for the night. It draws its conceptually and linguistically origin from the former nomadic practice of "un-mounting from steeds," in order to halt the caravan and set up tents in a location. Each night one's private sleeping environment had to be constructed, and each morning it had to be deconstructed.

At dawn, the nocturnal encampment and the intimate domestic space dissolves, and its territory is reassigned a more public valence. Meticulous care is taken to roll up blankets which are associated with the marital bed and return them safely to storage before the day starts. Curtains of mbārs are lifted, and remain lifted throughout the day, except on one side to provide shade from the rising sun. The man of the house is obliged to depart from the space, only to return intermittently or for the period of the hottest hours of the mid-day. The domestic space transitions into a publicly visible and accessible location that can receive visitors throughout the day. Especially for younger couples, husband and wife are proscribed by the demands of shame (*sahuw*) and modesty (*haya*) from interacting with one another during daylight hours. Through this practice of "descending," the domestic space and dwelling in the village space is

continuously produced, upended, and remade each and every night within the spaces constituted by more permanent built structures.

Soundscapes of the Night

"Dali Gimba is a loud village."

I wrote this observation in my fieldwork notebook on my first night back to Dali Gimba after many months away. In contrast to imaginations of Saharan space that often conjured by outsiders that situate it as a space of great isolation, emptiness, and deadening silence, nighttime in this bādiya enclave was enlivened with sounds. Moreover, as a blind village, Dali Gimba was *especially* boisterous. A closer examination of how blindness especially shaped the sensory world of Dali Gimba is addressed in Chapter Five.

The setting of the sun (*ghurūb al-shams*) appears alongside a soundscape rich with the buzz of birds (*asfoura*) chirping. Their songs are soon drowned out by the sonorous rendition of the adhān which projects from the loudspeaker of the village masjid. A fainter adhān, could be heard echoing from further away in the neighboring village, which was about a kilometer away. The audition of adhan is followed by a period of calm and stillness, with both animals and humans quieted. Gradually, the noises of life begin to pick back up and die out only later into the night.

Nighttime in the bādiya is conducive to communications. Prolonged conversations and discussions trailing deep into the night (*tasāmara*) are emblematic features of bādiya rhythms of life. Other animals that live in the Sahara are mostly nocturnal, and they also partake in the shared soundscape. There is the airborne traffic of crickets and locusts passing through the wind, and the din of dung beetles and toads who unearth themselves from the soil. Birds that are typically reliant on their acute sense of vision were active during the day but are now hidden

sleeping in trees. Instead, at night one can hear the flapping and screeching of bats ($b\bar{u}fur_{ii}ta$), who alternatively rely on their incisive sense of audition and ability to echo locate to navigate and hunt in the darkness, and the hooting of owls ($b\bar{u}ma$) whose large eyes have evolved to afford acute night vision rather than enhanced aurality.

After the night *descended* in Dali Gimba, I sat alone in the spot where I spread out my mat one night within my mbār. I could hear an overabundance of talk in the vicinity. Boundaries between homes in the village are aurally permeable. Conversations unfold seamlessly, with neighbors engaged in multiple layers of conversations. From my position, I counted at least seven different conversations taking place between families who lived in my proximity. Two of these came from mbārs located within the same fenced off compound (*manzil*) where I had set up for the night. Other conversations were from mbārs located in neighboring compounds, some of which were surprisingly far away. I could home in on conversations between husbands and wives who were eating dinner, having tea, and spending the night with their children. This was somewhat unusual because during the daytime these same married couples avoided interacting or communicating with one another directly or even being in the same location together in the public eye. Under the cover of the night, however, husband and wife are free to communicate with one another directly, even if they were audible to neighbors.

At nighttime, talk would also open between houses, with people effortlessly switching between conversations with immediate and distant interlocutors with the slightest modulation of volume. Conversations are communicated between participants at further distances with the help of intermediaries located in between who instinctively relay messages along to their intended targets, while seamlessly maintaining conversations of their own. Children are recruited to communicate messages across further distances, or to transport objects or conduct transactions.

They are ideal for this task because their traffic does not disturb the privacy of domestic spaces at the night.

Nighttime is also a high time for digital communications. Night provides the ideal conditions for making phone calls. After dark, men and women of the village make trips visiting the limited spots in and around the village where one or two bars of *rezzo* (cellular service, from the French *réseau*) could be found. Common hotspots include the corners of dārs, higher up near the pillars and trusses of mbārs, or on hilltops and the open areas in between villages. This digital culture was partially infrastructural: on many days, rezzo was often only available at night, even at these hotspots.¹⁰² But another reason for this had to do with a culture of shame (*saḥwa*) that encouraged married or romantic couples to only interact in privacy. People with spouses who were away from the village needed to seek out discrete locations at night to call each other. Secret lovers living in the same village too could be seen heading out in different locations to call each other. Being seen attempting to call one's significant other was a source of ridicule, laughter, and embarrassment among even between husband and wife.

Maintaining privacy of communication is a major challenge at night. One could never be sure who is awake, who may be present, and who may be in earshot in any given place. Villagers could pick up on conversations from even further distances they were located downwind. These hushed communications make an unmistakable part of the nightly soundscape, alongside whispering melodies of digitally reproduced sounds of media being played off cellular phones and car stereos. Grungy low-bitrate tracks stretched far across the soundscape, gracing people across the village with faint snippets of music, poetry, and scripture late into the night.

¹⁰² Other nights, rezzo might even be strong enough for villagers to find enough 2G internet connectivity to send and receive WhatsApp voice notes.



Figure VIII: Qur'an Students Sit Against Wall in Dali Gimba. Photo by Saquib Usman

Besides talk, another integral presence in the village soundscape is the cacophony of Qur'an recitation produced by students who gather at Muhammad Mahmud's compound to memorize the Quran. Dali Gimba has a reputation of an excellent location to study the Qur'an because its blind instructors from the Ummār were thought to be excellent listeners and thus excellent examiners, but also for having superior memories and better teachers of the Qur'an. More on blind alterity is explored in Chapter Five. From Dali Gimba, only about three or four boys irregularly attended the state school (*madrassa*) which was located in the neighboring village. However, nearly all the village children attended Qur'anic schooling for a number of years of their childhood. Especially at dawn, in the afternoon, after sunset, and late into the night, about a dozen boys would sit down at different locations scattered across the compound to repetitively read their daily portion of text (*kitba*) from their writing tablets. Recitation was not

collective as a chorus, but sporadic during these times. Individual students would recite sections aloud, then fall silent. Sometimes a few students would recite at the same time. Other times two students would volley their recitation back and forth, with one student starting up when the other stops. Other times, a number of students might begin reciting all at once, each reciting their individual sections. Young girls of the village gathered in another mbār in the village under the tutelage of a sighted Ummārī young man, as well as instruction for smaller children learning basics of writing on the tablet, reading, and articulating letters in a third space in the village.

The Qur'anic soundscape is not only produced by Qur'an students. From my typical sleeping spot, starting in the final third of the night (around 4AM) until dawn, I could hear Muhammad Mahmud begin his daily recitation of the Qur'an from his bed. His articulation of the Qur'an was not clear, rhythmic, or lucid, but rather quick and with an irregular cadence. It was as if he spoke the text rather than perform it. The old man told me that he did not let three or four-days pass without completing an entire recitation of the Qur'an. This practice was not unique to Muhammad Mahmud but quite common among many older "gray-haired" men (*shaybān*) and women who were identified as being from *ahl al-Qur'an* (people of the Qur'an), who were not just people who had memorized the Qur'an but were perpetually engaged in its recitation throughout their waking hours. Such people could be found in virtually any village of the bādiya.

Although the Qur'anic soundscape is a regular background feature heard in the landscape, it also frequently punctuates the foreground as villagers actively and responsively listen to it. Muhammad Mahmud and others family members would stay attuned to these various recitals while going about their daily activities and conversations. When a student makes a formal mistake in recitation—either by missing a verse, vocalizing an improper mood or

grammatical case (*'i'rab*), mispronouncing the sound of a letter (*makhrij*), improperly elongating a vowel, stopping at an improper location, or violating one of the other technical rules of recitation (*tajwid*)—a teacher or another student bystander would race to shout out the proper recitation to correct the student. Through their education, Qur'an students learned to hone their listening abilities to discern these minute formal aspects of audition and master the aural articulation of the Qur'anic text.

Other times, it wasn't the formal elements of the Qur'an that would penetrate the foreground but its substance that would manifest to add depth to the aural experience and imbue the environment with spiritual significance and symbolic meanings. On numerous occasions during my fieldwork, this interruption of Qur'an into the foreground would catch me off guard. For example, once I was confused because a villager with whom I was conversing unexpectedly said, "Yes, by my Lord" (balā wa rabbī) in a classical Arabic register. I then learned that they were reacting to a verse (95:8) that was being recited further away and was inaudible to me whose meaning is, "Is not Allah the wisest of judges?" For most believing Muslims, the aural reproduction of the Qur'an is interpreted as a novel animation of divine speech. Each instance in which it is recited produces an event and a space that is perceived as a new revelation. In Dali Gimba, this stance came through as effort was made to passively interpret Qur'anic text in ways that responded to its local context of audition, and not just as an utterance firmly located in the past, related to other contexts. For example, a verse being recited that included the words, "look at your food and drink" (2:259) was once offered as a humorous quip in response to a blind villager who asked out loud, "where is our lunch!" They would frequently respond to the recitation of the Qur'an affectively and through their verbal responses in ways that evidenced a semantic engagement with the text. That being said, badiya dwellers I met almost always

explicitly refused any explanation or interpretation ($tafs\bar{i}r$) of the text or offer the meaning of any verse or word of the Qur'an. This attitude was common even by "people of the Qur'an." They would typically deny having any knowledge about the meaning of any verse, even when the language was simple. They instead deferred to proper exegetical texts for such knowledge and affirmed the exclusive authority of qualified exegetes to offer opinions on such a subject.

Lastly, it is important to note that Qur'anic soundscape is not just a sensory quality of the environment that is produced and listened to by human subject, but that the landscape itself is often represented as a sentient entity that sensorially witnesses the Qur'anic soundscape and embodies its memory within its material structures. For example, during my fieldwork, there was an occasion where villagers were discussing the prospect of moving to a new development being built outside of Dali Gimba. Villagers who preferred staying in the village argued that the earth $(tr\bar{a}b)$ of Dali Gimba and its trees (*sidr*) that grew there have experienced and witnessed the Qur'anic soundscape of the village for many years and the Qur'an and its memory have become deposited in its soil. As such, they argued that the village constituted a valuable sacred space that they should not abandon for a new space whose environment did not contain such a history.

Darknesses of the Night

And by the night when it covers with darkness. (Qur'an 93:2)

Mauritania stands among several African countries that have the most limited infrastructures of electrification in the world. The World Bank has classified countries of the African Sahel as having, "no effective grid" (Rogers 2014). They estimate that in 2012, less than 5% of rural Mauritania was connected to the electrical grid (World Bank, n.d.). Most of bādiya in the Saharan West remains un-electrified. Due to these infrastructural circumstances, life in the Saharan bādiya mostly proceeds in darkness after nightfall. During the time of my fieldwork in

Dali Gimba (between 2017 to 2021), there were no central electrification or permanent light fixtures or televisions in the village. The village had solar panel systems for powering the pump for the artisanal well and a freezer, and a number of villagers had smaller solar charging kits to power cell phones, yet none of this electrification was dedicated to lighting. At its latitude, Mauritanian days and nights consistently ranged between 11 to 13 hours, depending on the season.



Figure IX: Full Moon Illuminates Dali Gimba's Night Photo by Saquib Usman

In alignment with the Qur'anic lexical habits,¹⁰³ bādiya residents refer to darkness in the plural as *dhulumat*. The *darknesses* of the night are multiple and encompass various forms. After sunset, the twilight colors the sky with a reddish hue known as *shafaq*. The darknesses of the night begin to "gather" (*ijtimā*') when this coloring disappears.

¹⁰³ The Qur'an always refers to darkness in the plural *dhulumāt*, and always refers to light in the singular *nūr*.

On "white" nights of the month that have a full moon, there is often enough ambient illumination for even blind Ummarians to navigate using their residual vision. However, around the new moon or on nights when the moon is occluded by clouds, the bādiya environment is shrouded by an overwhelming darkness. Navigating on nights such as these had this sighted ethnographer unable to see the ground beneath his feet. Regardless of the night, indoor spaces such as spaces within dārs are especially plunged into darkness. In the rainy season, flickering lightning may keep the night sky illuminating throughout the night. Occasionally, shooting stars may also brightly illuminate the atmosphere for a fleeting moment.



Figure X: Servicing a Car with Flashlights in the Dark Photo by Saquib Usman

During the night, sighted villagers often rely on flashlights to produce artificial illumination. Flashlights are highly sought after items that can be found virtually anywhere

goods are sold. They drive demand for batteries, but because these are expensive, many bādiya dwellers prefer using rechargeable solar-powered flashlights. However, simple mobile phones with built-in flashlights are the most frequently used source of artificial light. Because in most of the bādiya, cell service is only intermittently available, the flashlight function of these devices is often its primary function.



Figure XI: Qur'an Students Using Flashlights Photo by Saquib Usman

Sighted villagers may require artificial illumination for various activities during the night, such as locating items, navigating indoor spaces where the ambient light of the night sky didn't reach, in tea preparation, cooking, outhouse visits, or milking animals. Flashlights also play a pivotal role in facilitating Qur'anic and other textual studies for students using their wooden writing tablets ($alw\bar{a}h$). Nighttime is an ideal time to study their lessons because it is understood to be a time that contains fewer distractions. Qur'an students routinely gather to practice their lessons after '*ishā*' prayers, when the night's twilight fully disappears. Their voices could be heard practicing late into the night, and then again at the time of *subh* before and after the

sunrise. Because studying for sighted villagers involves repetitively reading their daily section of text from their tablets, studying at nighttime requires these students to use artificial lighting. The flashlight is thus seen as one of the essential objects associated with the Qur'an student, and in earlier times, candles, torches, or firewood fulfilled this role.

Despite the potential usefulness of flashlights, their use comes with serious drawbacks that limit their practicality. Turning on a flashlight in the Saharan night invariably causes insects to accumulate and swarm to the light source and along its pathway within seconds. Artificial light draws in moths, crickets, locusts, beetles, and other critters that are positively phototactic and attracted to artificial light sources because such stimuli are thought to stun their navigational systems. For this reason, flashlights are only used sparingly. Their use is not routine or consistent, but purposefully in bursts. Moreover, flashlights had to be kept as dim as possible.¹⁰⁴ Due to the accumulation of insects, activities like eating, drinking, food preparation, and milking animals are often performed in darkness, by sighted and blind villagers alike, relying on tactile senses and exploratory touch to avoid attracting insects.

Artificial lighting is avoided for other reasons as well. Shining light was also problematic because it inadvertently stripped the natural privacy secured by the darkness of the night. These conditions of darkness obscured visibility. The Qur'an too highlights this quality of night in a verse where God swears, "By the night as it covers" (92:1). In a society where covering the body is an important part of modesty (hay'a), this quality of obscured visibility was productive because it allowed people to feel less obliged to cover up. Women might let their *milehfāt* (full body dress veils) to fall upon their shoulders so that their hair was left exposed. Men felt comfortable wearing their open *darrā* tunics without undershirts, or with shorts or briefs instead

¹⁰⁴ All the flashlights that I brought from the United States ended up being far too bright to be useful in Mauritania. The best kinds took one AAA battery and remained under three lumens.

of pants (*sarwāl*), or perhaps even without wearing any type of undergarment. Visibility in these contexts is not eliminated, but only occluded as a result of the residual ambient light in the atmosphere. The cover of darkness also makes the night an ideal time for villagers to head to the outskirts of the village to defecate in privacy, or to head out and make clandestine phone calls.

Flashlights disrupted this cover, even when they were shined from far distances. Villagers at night would call out, *iglā `an al-daw* '! (shut off the light) if a flashlight was too bright or left on for more than a few seconds. It is considered rude and experienced as a kind of violence to intentionally shine light directly on someone else because doing so created an absolute differential of visibility some people could be left exposed and visible to all. Also, it obscured the visibility of the flashlight user behind a wall of light. Using flashlights in excess is seen as a deficiency of sensory skill and intuition. Illumination from artificial lighting stuns the nocturnal vision of villagers, as it does with nocturnal critters, causing a condition of "nyctalopia," or night-blindness for some time after exposure.¹⁰⁵ Due to these infrastructural, ecological, and cultural limitations on the use of artificial light, most activities in the bādiya night proceed in the dark.

Scholarship of the Night

Although memorization is an important aspect of Islamic education in numerous regions of the Islamic world, Mauritanians enjoy a reputation for being especially prodigious in their memorization of texts. For them, being able to thrive in conditions of darkness was taken as a source of communal pride among bādiya dwellers. Darkness of the night is a welcome condition

¹⁰⁵ Guidelines from The International Dark-Sky Association (IDSA) reported by the US Forest Service state that, "If you look at white light from either your flashlight or your cell phone you will not be able to enjoy the wonders of the natural night sky for 20-30 minutes" (USDA Forest Service, n.d.).

that bādiya dwellers consider to be a sign of the erudition of their intellectual tradition. As one villager once boastfully said:

In the cities of the Islamic world, you will find "daytime scholars." Their knowledge appears to be vast, however, when the sun sets and the night turns to darkness, they can no longer read their books and their knowledge is lost. Here, in Mauritania, we have "scholars of the night." They have all the texts and their commentaries memorized. They are never bereft of their knowledge. They can teach at any time, even while riding on the back of camels in the middle of the night!

Although students studying the Qur'an or other Islamic texts do routinely use flashlights when they are reviewing their lessons at night, the greater pedagogical emphasis is placed on memorization aims to remove the need for reading and for texts entirely. Physical copies of texts are approached as mnemonic references whose primary importance is to assist memorization. Students' progress in their lessons is inversely related to the use of flashlights. Each new lesson begins with the student writing a new passage of text onto the tablet by either transcribing it from the audition of a teacher who had already memorized it, or else by copying it from a written manuscript. Next, the student closely reads the section of written text to a teacher for approval. During this reading, teachers correct the recitation and students adjust the writing on the lawh. After being able to recite the section of text properly, students would individually try and memorize the section of text. At first, this process is very visual, and involves practices of staring at one's lawh and reading the written text. As students memorized their text with greater consistency and accuracy, the section of text eventually reached the point of being "cooked" $(t\bar{a}yib)$, at which point the physical need to read the text from their tablets was eliminated as students acquired the ability to read it from their hearts.

In Dali Gimba, blind villagers are called on for many tasks that sighted people found to be difficult. For example, when something needed to be found or fetched from inside a dār or another dark location, blind villagers were ideal for the job because of their familiarity with navigating through the space in darkness. They would also take on roles as guides for sighted people when navigating in the dark, holding hands and leading the way when the night was too dark for sighted villagers to find their way. More on the social roles for the blind are discussed in Chapter Five.



Figure XII: A Butcher Preparing for Slaughter Before Dawn Photo by Saquib Usman

Denizens of the bādiya typically drift to sleep several hours after *`ishā* ` or around midnight. By this time, Qur'an students have concluded their lessons and departed for the night., Into the second third of the night, most villagers fall asleep but some remained awake and active late into the night. Young men and women used nighttime to visit one another and gather at various mbārs, sometimes walking to adjacent villages or far distances. Younger adolescent boys of the village also gather at this time almost every night. They could be heard wrestling, kicking around a soccer ball, and roaming around in the vast landscape and the interstitial "wilderness" (*khuluw*) areas off the beaten tracks that connected villages.

Animals too cease making noise, except for the occasional round of donkeys braying. In the last "third" (*thuluth*) of the night, early risers awaken. Roosters ($d\bar{i}k$) begin to crow, and a time of day is ushered in that is an ideal time for personal spiritual activities and contact with the divine. Muhammad Mahmud begins his Qur'anic recitation. I hear one or two men who sporadically raise their voices to chant the *tahlīl*, *lā ilāha illā 'llāh*, or the name of God, *Allāh Allāh* in a weathered tone that is audible across the village space, yet soft enough not to awaken people. Other early risers may include cowhands who must gather herds and guide them to the well at their appointed time to use it, or other men responsible for fetching water. On days when meat must be prepared by lunchtime, Haratīn butchers also awaken at this time to slaughter animals and prepare them for cooking (see Image VII above).

At dawn, as "the blackness of the night has begun to lift," the morning prayer, *subh*, or what is also called "the middle prayer," is performed. About half of the men in the village go to the masjid for prayers. Others pray in the vicinity of their sleeping arrangements. The time for the prayer ends, while the "starts are [still] clear and fill the sky" (ibn Anas 2019, 76).

The Break of Day

The morning prayer and the subsequent rising of the sun signify a transition in the phase of the day. It is now the *şabaḥ*. At this juncture, family members typically convene outside the western side of their dwellings where they may share a large bowl of $zr\bar{i}g$, which is a mixture of goat or cow milk, water, and sugar. During the rainy season, animals are milked twice a day, once in the morning, and again in the late afternoon. However, in the rest of the year, animals usually produce very little additional milk, and residents of the bādiya heavily rely on powdered milk imported from Europe. In addition to $zr\bar{i}g$, the morning heralds the first session of Mauritanian green tea (*atay*) of the day. It is taken exceptionally dark, strong (*qawī*), and sweet.

These gustatory qualities are poetically lauded for their soul-invigorating $(khl\bar{a}g)$ and intellectsharpening (dhakira) effects.

The time of the şabah is one of the times of the day when sleep is discouraged. The other time is from the late afternoon (*dahmīs*) until the disappearance of twilight in the sky. Sleeping at these times—when the day is transitioning to the night, or when the night transitions to the day is believed to be counterproductive because it induces lethargy (*t'ab*) in the body. Elderly villagers especially held this injunction against sleeping at these times in high regard. Muhammad Mahmud elucidated this belief by quoting from a hadith found in the *Muwatta* which states, "A person who sleeps [during these times] may he have no rest; a person who sleeps, may he have no rest; a person who sleeps, may he have no rest!"(ibn Anas 2015, 11)¹⁰⁶ Muhammad Mahmud further explained that this proscription stems from type of particles that are emitted by the sun and stars at these times that ought to be experienced in a state of consciousness and could cause harm when exposed to a body that is unconscious. After the sun has risen to a considerable height in the sky and radiating its full "brilliance" (*ishrāq*), the proscription from sleeping is lifted, and after some time, napping becomes a recommended practice.

The Heat and Brightness of the Mid-Day

The brightness and heat of midday are intense (*imtīn*). Its light is radiant and "white" (*bīdh*). It reflects off the earth (*trāb*) and compels one's eyes to squint. Its extreme brightness is blinding (*tu'ammī*) and distorts the vision's reliability by creating mirage (*sarāb*). For Bidhān adults, direct or even indirect exposure to the sun is feared for its ability to "weaken" the soul

¹⁰⁶ The hadith translated literally reads "whomever sleeps at this time, his eye does not sleep."

(*khlaag*), leading to a decrease in vitality and appetite. Bīḍhān dwellers of the bādiya often expressed the belief that sensitivity to the sun critically depended on ethnicity and age and claimed that Ḥaratīn people and all children have bodily dispositions that allow them to endure the intensity of the sun. Many Ḥaratīn villagers accepted this point of view and boasted of it as a source of pride and strength, while others vehemently rejected it as a false racist stereotype. The intensity of the sun, and exposure to the elements was also seen as a positive experience for children, who were left to run around naked until the age of six.

In the bādiya, the sun is perceived as a manifestation of Allah's majesty (*jalala*).¹⁰⁷ It is revered, respected, and feared. Symbolically, the midday¹⁰⁸ sun is associated with death and hellfire, as reflected in a hadith from the *Muwațța* that a villager quoted which states, "The Messenger of Allah said, 'Scorching heat comes from the blast of Jahannam'" (ibn Anas 2015, 11). Exposure to the white sun also affects the body's sensory systems and sensitivities (*hassasiyāt*) (of adults) by dulling the vigor of consciousness, causing dizziness (*daukha*), disrupting the sense of balance, distorting the visual capacities, and causing the body to heat (*humma*). Except during the rainy season, the heat of the environment tends to be dry, leaving human bodies moist and covered in a sheen of sweat (*`arg*).

The intensity of the heat in the summertime (*sayf*) in the contemporary bādiya is considered exceptionally difficult by its inhabitants.¹⁰⁹ Older villagers reminded their younger kin how enduring such heat is a new experience in the bādiya's history which they did not face in the former times of nomadism before the 1980s. Contemporary village networks in the country are located in regions that were once deemed "dead" (*miyyit*) during nomadic times because they

¹⁰⁷ Other natural signs are alternatively recognized as a manifestation of Allah's beauty (*jamāla*).

¹⁰⁸ Midday here refers to the middle of the daytime $(nah\bar{a}r)$ and not of day in the sense of the quotidian time unit (yawm) whose middle is dawn.

¹⁰⁹ At 1 PM May 20, 2019, I recorded a temperature of 37.6 degrees (C) inside a dār, and 49.1 degrees outside. The temperature of the ground at this time was 62.5 degrees (C).

were too hot and arid to be hospitable during the summer months between April and June. As a result, these regions were evacuated as they migrated southward until the onset of the kharīf. With sedenterization, villagers now must confront the daunting task of remaining in these regions throughout the summer and enduring its intense heat.

The exceptional nature of the bādiya heat is further underscored by unique religious exemptions that badiya dwellers grant themselves. Men and women in the country are generally very diligent in their ritual obligations (*'ibādāt*). They can virtually all be seen performing ritual ablutions, praying five daily prayers, and generally taking the demands of Islamic jurisprudence (*figh*) seriously in all matters of life. However, many villagers choose not to fast during the month of Ramadān, particularly when it falls in the summer months. They invoke the principle of "facilitating dispensation" (rukhşa) that is outlined in Maliki juridical discourse to claim that the ecological conditions of the Saharan badiya "compels," (tud'turr) its inhabitants to abstain from fasting to avoid excessive bodily suffering and undue distress.¹¹⁰ Youth under the age of eighteen almost never fasted, and a significant number of older villagers also excused themselves from fasting. Women of the village took it upon themselves to fast more than men, and typically only abstained when they were menstruating, pregnant or nursing. A sizable minority of badiya dwellers, however, did not to take the prevailing facilitating dispensation, and willingly fasted during Ramadan days. They did so with an acknowledgement of the exceptionality of the space and without denying the validity of the dispensation that others took. For them, it was a matter of excellence (*i* $hs\bar{a}n$) and striving (*mujahada*) in religion ($d\bar{n}$), and a sign of showing gratitude (*shukr*) to God and not solely out of ritual obligation.

¹¹⁰ The principle of *darūra* is expressed in the ayah, "He (God) has explained to you in detail what is forbidden to you, except under compulsion of necessity." (al-An'am, 6:119) See also (Kamali 2021).

Overall, the heat and intensity of the midday sun makes the daytime in the bādiya world an exceptional time of the day. Moreover, the exceptional intensity of this time in contemporary Dali Gimba constitutes the region as a special space where patterns of everyday life and social practices are especially influenced by a pattern of diurnality.

Techniques to Avoid the Sun

Daily movements within and around the bādiya's built structures are primarily guided by the need to avoid exposure to the sun.¹¹¹ Like khaymas, mbārs and dārs in village spaces are always positioned along cardinal axes. Mbārs, for instance, are situated so that their gable ends are always positioned to the sahel (north) and sharig (south) directions. Openings or "mouths" of mbārs are always situated on the gibla (west) side of the structure, and this is the primary direction that they are entered through.¹¹² Throughout the day, inhabitants orchestrate a gradual shift in their positions around these structures in response to the movement of the sun. During nights and early mornings, villagers spend time on the western porch of the mbār, with the *idfa* drapes drawn down on the eastern side of the building to provide cover from the rising sun. As the morning sun intensifies, villagers migrate indoors, but remain on the western half of the edifice. When the sun reaches its zenith (*zawāl*) and the heat is most relentless, villagers settle themselves in the middle of the building rotated ninety degrees so that their heads are turned either towards the south or north direction. Following the zenith, inhabitants gradually move to

¹¹¹ The impetus to avoid direct exposure to the sun is also reflected in the iconic clothing styles of Saharan cultures which encourage the covering of the head with a turban and the face with veils. Consider the Tuareg, who are also known as *Kel Tagelmust*, or "people of the veil," or the Sanjadja Berbers from the region, who are also known as the *mulaththamun*, or the wearers of the face veil, known as the *"litham*" (Pettigrew 2019, 2). Although these clothing styles are certainly not just a functional adaptation to the environment and they serve important symbolic and moral roles, they are still understood by users to be healthy and protective choices of clothing.

¹¹² Note that the nomenclature of the cardinal directions in Hassaniyya correspond to different absolute geographic directions depending on the regional dialectical context. In the Hodh, Adrar and Azawad sub-regions of the Saharan West, "Sahel" refers to north, but in other sub-regions, Sahel could refer to the northeast, or even the east (Behnstedt and Woidich 441, Boulay 145).

the eastern (*tal*) side of the mbār's interior and eventually to the eastern porch later in the afternoon.

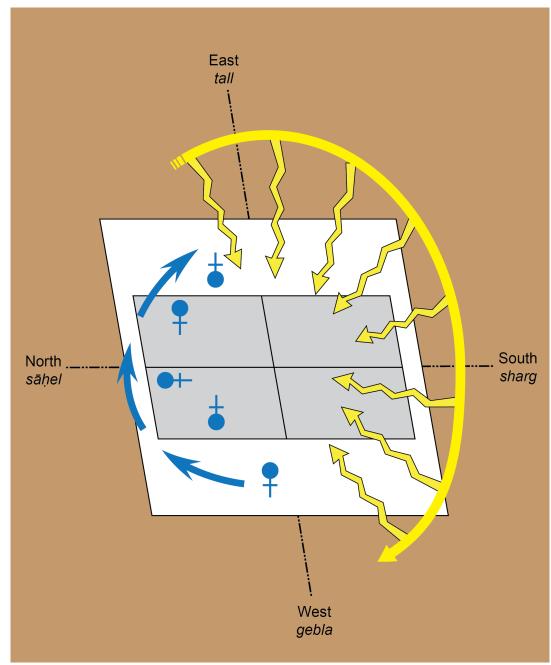


Figure XIII: Body Orientations Under the Saharan Sun The gray rectangle represents the space of the mbār, and the white square represents the concrete platform upon which the building stands.

Even within the confines of mbars and dars where the sun may not be directly visible,

bādiya residents maintain a keen awareness of its precise position through a palpable sensitivity

for its radiating heat and through their internal sense of time. This awareness prompts them to adjust their bodily orientations to face directly opposite to its rays with unwavering dedication. This practice is taken incredibly seriously. During my time in Mauritania, one of the most common phrases I heard was, "gūmū 'an al-shams!" (get out of the sun!), which was shouted by my hosts when they found me sitting or lying in the "wrong" position. They would nudge me to reposition myself to a more appropriate position in relation to the sun, even if it was to move by just by a meter or to slightly rotate my body by a few degrees.

In addition to the shelter provided by built architectures, trees are also valued for their capacity to provide shade from the sun while allowing villagers to remain exposed to cooling winds. The effectiveness of this natural shade, however, varies depending on the species of tree. Even when trees offer a canopy of similar size, for example, the shade offered by the leaves of the *tayshtaya* tree (*Balanites aegyptiaca*) are not as cooling as the shade provided by a *talhaya* (*Acacia seyal*, or "gum arabic") tree.

It is important to note that this perceived sensitivity and vulnerability to the sun and the physical elements of the bādiya was not universal. Children, for instance, are considered capable of withstanding the intensity of the midday sun, and exposure to sunlight is thought to be especially beneficial for their growth and upbringing. Young children (*subi*) growing up in the bādiya typically remain unclothed or wear only a shirt until they reach the age of four to six. They face no restrictions when it comes to spending time playing or studying outdoors under the midday sun. Villagers assert that this practice strengthens their bodies, toughens their skin, and increases their tolerance for heat.

On one noteworthy occasion during my fieldwork, I sat inside my mbar at midday overlooking a group of young Qur'an students who had taken their seats directly outside the

mbar where they began reviewing their lessons. I turned to the teacher, who was sitting inside next to me, and invited him to permit the students entry into the mbar to conduct their lessons shielded from the blazing sun, to which he responded with conviction:

No, no—How could they learn in here? In the shade, laying down comfortably on its smooth concrete surface? Ha-ha! That couldn't be. They must be outside, squatting low, close to the earth $(tr\bar{a}b)$. They must face the wind. They need to be there for it gives them humility, and you need humility to receive the word of Allah. Without that, the Qur'an could never be deposited. The intensity (shidda) of the sun—it helps them in this.

The sensorial and corporeal encounters with elements of the bādiya environment are indispensable for fostering the emotional and psychological disposition necessary for the transmission and embodiment of sacred Qur'anic knowledge. Although villagers are meticulous in maneuvering bodies away from the soul-wrenching Saharan sun and employing natural and built structures to shield themselves from its rays, such strategies of living were counterproductive in the context of sacred learning. Instead, physical exposure with the sun, earth, and the winds ($r\bar{t}h$) of the bādiya are critical conditions of acquiring knowledge.



Figure XIV: Midday Napping in an Mbār Photo by Saquib Usman

Sleeping at the Height of Day

This most intense part of the day involves a returning home. Lunch is the central and largest meal of the day and preferably taken piping hot. Aside from this midday repast, bādiya dwellers also commonly partake in two distinct napping sessions, known as the *dhahīra* and the *qaylūla*. The dhahīra takes place in the morning hours, while the sun has not yet reached its zenith (*zawāl*), whereas the qaylūla unfolds in the mid-day and early afternoon, after lunch and the performance of the dhuhr prayer.¹¹³ Older villagers, such as Muhammad Mahmud, viewed these naps as a vital form of self-care that is increasingly losing its value in today's society. He urged his sons to pause from the business of their days and lie down to take a nap, even if only for a short duration. On exceptionally hot summer days, virtually everyone sought refuge in these

¹¹³ On days with exceptional intensity from the sun, the dhuhr prayer is delayed until later in the afternoon.

siestas without needing any additional encouragement. The intensity of the mid-day sun seemed to lull everyone to sleep. These naps were characterized by their brevity and were punctuated with bouts of wakefulness as individuals reclined on their sides ($t\bar{a}k\bar{i}$), swatting away pesky flies that swarm in abundance during this time. The sensory experience of the bādiya's environment during this period oscillates between states of consciousness and unconsciousness, between eyes that are open and eyes that are shut.

The morning and afternoon naps that occur under the blazing sun are believed to foster particularly vivid, meaningful, and "true" dreams (*ru* '*ya*). Saharans draw upon Islamic and Sufi doctrines from sources such as ibn Sirīn (d.729), al-Ghazālī (d.1111), and Muḥammad Rātib an-Nābūlsī (b.1938) who interpreted sleep as the departure of the soul from its host body, with dream visions being the sensory manifestation of the soul's journey through the concealed world of spirits (*alam al-arwah*) that is populated by a range of invisible agents and transposed upon the ordinary sensory landscape.

Sleep resembles death and is poetically referred to as a "small death," because both involve the soul's separation from the body, but the separation involved in death is more permanent and absolute. Due to the sun's harshness, the customary practice of napping, and the propensity for vivid dream visions during these interludes, the "sensory world" of the bādiya is intertwined with imagined domains and social interactions with the dead and other invisible more-than-human actors. Through these linkages, the intensity of the bādiya sun is associated with the idea and experience of death. Nappers also mimic the dead in that they are oriented in the same cardinal direction as bodies interred in the graveyard, with heads pointing towards the north and faces turned east, in the direction of Mecca (refer to Figure XIII).



Figure XV: Visitation during Dahmīs Golden Hour in Dali Gimba Photo by Saquib Usman

Revival in the Dahmīs

The most celebrated time of day in the bādiya is the *dahmīs*,¹¹⁴ which is the late afternoon period that begins with the 'Asr prayer and lasts until sunset. By this time, the blaze of the midday sun gives way to a cool and tranquil ambiance. Its former piercing white radiance transforms into a reddish (*hamra*') hue. The liminal state of consciousness of the midday is followed by the clarity of the dahmīs. It is a time of coming back to the senses, a restoration of life after the onslaught of the mid-day heat.

While midday prompts a retreat to one's abode to lunch with family and personal time for naps, the arrival of the *dahmis* ushers in a shift towards sociability, conviviality, and mutual

¹¹⁴ Muhammad Mahmud explained that "dahmīs" is a Hassaniyya word that corresponds to the Fusha term "*al-āṣāl*" which is found in the Qur'anic verse, "*In houses which Allah has granted permission to be exalted, therein His Name shall be remembered, in the mornings (ghuduwi) and the evenings (al-āṣāli)*" (24:36).

visitation. Most villagers used this time to walk to other homes in Dali Gimba or further away in other villages. Bādiya denizens hold a profound appreciation and love for the aesthetic qualities of the environment at dahmīs. In the symbolic language of the badiya, the morning is symbolized as a "breathing out" of the environment, and the mid-day is representing the apex of exhalation. The dahmīs and the approaching night are akin to a revitalizing breathing in of air.¹¹⁵ They perceive its enjoyability as a communal reward for having endured the rigors of the day. One villager expressed this sentiment by quoting the ayah of the Qur'an, "*Indeed with hardship comes ease*" (94:6). The same quote is used to refer to the joy experienced in the months following the month of Ramadan for those who fast. It is a relief.

Seasonal Shifts

The sensory world of the bādiya is also crucially divided by the temporality of seasons. The changes in seasons are indicated by distinct sensory qualities. The direction and quality of winds felt are related to particular seasons. The icon of the kharīf is the *li māyā*, which is a wind that arises from the north (*sahel*) or the east (*tal*), usually contains sand, and sometimes heralds the arrival of rainclouds (*naww*) and rain (*sahāb*) that render the kharif environment green with grass and spotted with watercourses. The kharif may also bring winds known as the *shargiyya*, which arises from the south and may also portend rainfall, and the chilling *waqiḥa* which comes from the southwest. As the kharif wanes, an interseasonal period known as *illāwā* (which usually arrives in September), brings the *imigrayn* and the *swayhaliyya* winds that originate towards the north.

¹¹⁵ Muhammad Mahmud explained this analogy through quoting a verse from the Qur'an, "*And by the dawn when it breathes out*" (81:18).

The shift to the winter season (*shitā*) from November to January brings its own winds, such as the *ligrīs*, which carry a biting cold from all directions, and the *şabā* or *'aqīm*, which comes from the east and is identified as the infamous tempest that devastated the ancient people of the Prophet 'Aād. The summer (*sayf*) season is characterized by the scorching eastward *irīfī* winds, as well as the occasional *gibayliyya* which arises from the west. In the bādiya, remaining aware and tracking the winds is an important activity by men and women, as they not only indicate the season, but provide important means to anchor oneself in space and generate awareness of one's internal compass.

Hassaniyya speakers in the Saharan West habitually employ an "absolute" frame of spatial coordination whereby they compute and specify the location of objects with respect to other objects (Majid et. al. 2004, 108). Specifically, they describe the spatial orientation of objects relative to the cardinal directions, even in small-scale descriptions of immediate space. For example, they might say something like, "the kettle is *north of* the bed," instead of saying "the kettle is left of the bed," or "at the foot of the bed." This linguistic convention deeply influences cognitive development, "perceptual tuning," spatial cognition, and practices of memory encoding (Ibid.). In each season, recognizing the direction and type of wind provides both sighted and blind villagers with a tactile means of orienting themselves cardinally in space, in addition to the visual apprehension of the position of the sun. When bādiya residents venture to Nouakchott, they often lament the spatial disorientation resulting from the labyrinthine structures that obscure wind direction.

The kharīf season brings torrential rainstorms that sporadically drench the land throughout its duration. One evening in July, at the onset of the kharīf, a blind villager named Cheikhna remarked, "Have you smelled this wind? —that scent is *mayyār*. Perhaps the raincloud

will come tonight. See, there is filth (*l-awsakh*) in the sky." He pointed to the sky, prompting me to ascertain what the "filth" in the sky might be to confirm his statement.

Inhaling deeply, I took a whiff of the air and noted what words came to mind: *rich earthy—cool—heavy—burning—oxidized—burlap—mulch*, and *birch*. Cheikhna described it as "dry grass, upon it water" (*hashīsh yābis alayhi ma*"). The wind came in tufts from the south. My Garmin smartwatch notified me of a drop in atmospheric pressure and issued a storm alert, although it had not been accurate so far in the season. For Cheikhna, the olfactory signs present in the wind indicated the coming of the storm and mediated knowledge of visual signs of the cloud that were indeed present in the sky. Later that evening, animals in the village began behaving differently and as the wind calmed to a stillness, the torrential rainstorm indeed arrived.

Village life rhythmically adjusts to seasonal changes in the bādiya. Whereas in the past nomadic transhumance migrations involved caravan travel across the vast Saharo-Sahelian region, movements in the present-day village involve circuits of movement between village architectures. During winter nights, rainstorms, and sandstorms, villagers gravitate towards the dār for shelter. Conversely, in the sweltering summers, residents often seek the refuge of the mbārs, with their curtains drawn up to harness the benefit of winds.

Materiality of Sensory Bodies and the Environment

The material conditions of the bādiya environment also shape the experience of the sensory world by influencing bodily techniques of sensation and affecting sensory organs of bodies. A villager in Dali Gimba once told me that the clearest indication that someone had lived the nomadic life was the traces of the sun that were etched into their faces. She told me that the life of nomadic movement involved much walking and exposure to the sun, and these conditions significantly altered the skin of the person.

The physical features of the bādiya landscape also profoundly influence conditions of locomotion and the habits of gait. Fallen branches with needle-like thorns (shawgat) are strewn across the surface. They are bound to puncture the soles of anyone walking in the region sooner or later and cause immense harm when they do. Villagers prefer wearing sandals that are slightly oversized and worn loosely hanging off the top of the foot. They walk with a gait that takes care to lift the feet up with every step so as to avoid scooping up soil and causing sharp woody seeds known as *tādrāsa* from becoming lodged in the toes. Clothing too must be handled in a way that prevents sticky *anītī* seeds that are inundated in the soil from binding to the fabric. Over a lifetime of traversing through such a terrain, badiya dwellers develop calloused soles that are impervious from being easily punctured. Visitors from Nouakchott or elsewhere frequently grapple with the terrain, learning to walk with nimble steps. These soil conditions cultivate a humble and unassuming demeanor, instilling an intrinsic connection between the environment and the art of walking. In particular, the desert environment delimits visibility in several crucial ways. Sight and sightedness depend on a balance of illumination and darkness, but in the bādiya, the extreme polarity of the brightness of midday sun blinds, and the darknesses of the night likewise obscures the vision.

My own experience in the bādiya underscored the ways in which the materiality of my senses influenced my perception. While there, the integrity of my vision and my sense of sightedness collapsed on several occasions. During my initial encounter with a sandstorm $(li \, m\bar{a}y\bar{a})$, I discovered that my contact lenses were a magnet for minuscule, abrasive grains of sand that left me in excruciating pain. The episode left me amazed at the vulnerability of my eyes, my vision, and my general sense of well-being which could disintegrate from a single grain of sand. After awakening that day, I vowed to never be caught without my scarf-turban (*hawlī*)

ready to wrap up my face and shield my eyes if from impending sandstorms. Another sandstorm episode made me swear off electing to use contact lenses for the rest of the trip.

The environment was also unfavorable to other visual technologies. I arrived in Mauritania with two pairs of eyeglasses, both of which met unfortunate fates. The first were shattered beneath the unwitting foot of a blind Ummarian villager, while the other met its demise when they tumbled down a well. I could only replace the glasses a few weeks later when I travelled to Nouakchott. Because I am nearsighted with a prescription of -5.0, and have astigmatism in both my eyes, these few weeks reminded me of the limitations of my uncorrected visual acuity. When I eventually acquired a new pair from Nouakchott, adjusting to the new prescription brought its own headaches. Environmental condition also interfered with other technologies of vision. The intensity of brightness in the environment unexpectedly exposed all my unboxed polaroid film right through its packaging. Ethnographic research often entails practices of "observation," yet when immersed among blind individuals in Dali Gimba, the reliability of my sight faced scrutiny. If I failed to visually locate a roaring motorcycle crossing in the distance, blind interlocuters would teasingly question, "*Yā Ali*—Are you *sure* you are sighted?"

Environmental conditions that delimited the possibilities of vision were also experienced by local bādiya dwellers. In Dali Gimba, Ummārī blindness was not the sole form of blindness. During my time in Mauritania, numerous people sought my assistance with their ocular ailments, pains and difficulties with their eyesight. I told them that although I was researching blindness, I was not a clinician and could not offer any medical expertise. Still, they implored me to photograph their eyes and find out what I could about their conditions and their potential treatments.

Cataracts affected many elderly villagers. With rising diabetes that are inextricably linked with the increased consumption of simple and complex sugars, from breads, grains, and granulated sugar, along with a relatively sedentary lifestyle, a number of villagers suffered from symptoms of diabetic retinopathy. Other ocular issues and causes of blindness are related to environmental conditions. One woman whose eyes I photographed was classified by my ophthalmologist friends as having an advanced case of pterygium, which is an overgrowth of the conjunctiva tissue that can extend across the pupil and distort the surface of the eye and obscure or blur the vision.¹¹⁶ The condition is understood to be caused by, "long-term exposure to the sun's ultraviolet (UV) light," or else from "eye irritation from hot and dry weather, wind and dust." Another villager appeared to have signs of "solar retinopathy," which is a condition caused by UV radiation which destroys the rods and cones in the eye and essentially burns a hole in the retinal tissues and creates a "scotoma," or a blind spot in the central field of vision. Such cases are common in areas with high UV exposure such as the Sahara. Additionally, glaucoma appeared to afflict several villagers. According to the World Health Organization, West Africa is a region with the second greatest proportion of the world's blind population. Most of these cases are deemed to be "preventable," causes of blindness that include infectious diseases, such as blinding trachoma, and river blindness (onchocerciasis).

Sensing the Invisible World of Spirits

In the world of the bādiya, the limits of human vision prevent the perception of invisible entities, interactions, and activities that exist and are present in the sensory world yet remain hidden from the "external" (*dhahiri*) practice of vision. These invisible domains are populated by

¹¹⁶ I thank Drs. Shayma Jawad and Kamran Riaz for identifying these conditions and explaining their etiologies.

"angels," made of "light," and jinn, who are made of "smokeless fire," and the spirits of the dead. Although these spirits evade human vision and are immaterial, they are still active in the landscape and can exert significant influence and consequence in local social worlds.

Although these beings evade ordinary human the sense of sight, through the vision of the "external" human eye, one way they become sensible is by the use of the "inner" senses (*al-hawāss al-bāțina*). One such sense is called *basīra*, which is a spiritually endowed condition capable of perceiving the true meanings of things in the world. Historian of the Sahara, Erin Pettigrew has highlighted how certain Muslim scholars historically became experts with privileged access into these invisible domains through the acquisition of Islamic esoteric knowledge, and exerted power in society by mediating with the invisible beings there (2023).

The presence of these invisible beings is also sensorially apprehended through auditory cues present in the local environment, especially through the mediation of animals, or children. For instance, there is frequent aversion, physical repulsion, ridicule and complaint in response to the braying of donkeys, Some locals offered Qur'anic evidence for this aversion, which explicitly singles out the sound, "Indeed, the most unpleasant (*ankar*) sound is the braying of the donkey" (31:19). Others explained this aversion by asserting that donkeys are special animals with the special ability to see jinn and demons. The distressing nature of their bray stems from its indication that they have observed a demon, confirming the arrival or presence of malevolent spirits in the immediate surroundings. Conversely, roosters are believed to possess the capacity to see angels (*malak*). Their crowing is thus manifest as a sign of angelic sighting and affirms the presence of angels in the vicinity at the moment. This belief is traced back to a hadith of the Prophet Muhammad, "When you hear the cock's crow, ask Allah for His favors, for surely it has seen an angel. When you hear the bray of a donkey, seek refuge in Allah from Satan, for surely it

has seen a devil." The repeated crowing of roosters during the last third of the night and the early morning prior to daybreak is a sign of divine presence, angels, and spiritual significance of this time of day. These auditory features of the sensory landscape offer publicly accessible means of perceiving elements of the hidden world inhabited by sprits.

Animals are not the sole entities thought to directly sense these unseen beings, as children are also believed to often have access to these concealed realms. Additionally, shooting stars (*shihāb*) that flash across the sky for a moment are said to be jinns attempting to eavesdrop on the *mala al-'ala* ("the higher plenum")—which is the forum where Allah communicates with the angels and where divine secrets of the universe and the Unseen world are exchanged—but are thwarted. Through these diverse avenues of "indirect" sensation, often mediated by the eyes and accounts of others, the invisible social world emerges as a remarkable observable facet of the local sensory world. In addition, these liminal temporal domains of sunrise and sunset, "dirty" spaces such as abattoirs, cemeteries, and old uninhabited houses also provide auspicious occasions for the unveiling of the unseen world, and the appearance of invisible agents.¹¹⁷

Conclusion

The sensory world of the Saharan bādiya is comprised of a distinct range of experiences, perceptions, and interpretations. While its harsh ecological conditions do not determine sensory practices, they do provide material conditions that critically shape and delimit the sensorial engagement of its inhabitants in profound ways.

In many ways, the Saharan ecology is sensorially blinding. Perception in this world calls upon a distinct variety of multi-sensory experiences. From the darknesses that characterize the

¹¹⁷ I thank Erin Pettigrew for this insightful parallel observation.

night as a time of aurality and communication, to the ways that the intensity of the Saharan sun influences daily habits, the ecology of the bādiya connects its inhabitants to the rhythms of the natural world in its daily and seasonal cycles.

Furthermore, the sensory world of the bādiya also extends beyond the ordinarily "visible," into invisible domains where angels, jinns, and the deceased coexist alongside the living and leave their mark on the sensory landscape. Through auditory cues of roosters and donkeys, the boundaries between the seen and the invisible blur, revealing a deeper layer of existence that is woven into the fabric of everyday life.

Chapter Five: Blind Alterity, or "What difference does blindness make?"

Questioning Sightedness

As a foreigner to the bādiya, during my time there I was prone to frequent missteps. I would tear my *darrā*['] tunic on the jagged edge of a fence. I would step on branches studded with sharp *shawgāt* that would pierce my heel or scrape my back while ducking to enter the low entrance of an mbār. In other instances, I failed to perceive what others noticed with ease, such as specific clouds forming in the sky or the location of a motorcycle rumbling in the distance.

Such lapses did not escape the humor of the village, especially among blind Ummārīs who would use the opportunity to impugn my sense of sightedness. They would jest, " \overline{A} li! —Are you truly sighted (*mubşir*)? ... Can you see (*tashūf*) *anything*?... or are you blind? (*a*'*mā*)." This type of taunting did not only target me. In this village, sightedness was on public display and any sighted person in the village was often subject to these kinds of jokes and scrutiny. The joking however, made me think—*Was I sighted*? What does being sighted mean?

In Chapter Four, I explored the environmental conditions of life in the Saharan bādiya such as intense bouts of brightness, darknesses, and blinding sandstorms that influence the possibilities of visibility. I shared how these conditions, at times, incapacitated my technologies of corrective vision, and made me contend with my own near-sightedness that typically remains corrected in my everyday life in the United States. Besides these physical conditions that limited my visual capacities, the usefulness of my vision was also practically delimited due to my position as an outsider unfamiliar with the local interpretive schemas needed to make sense of the visual world.

On the other hand, the status of my sightedness also came under question in relation to other blind and sighted individuals who possessed divinatory ways of seeing and spoke about invisible realities that evaded my vision. What was the relationship between blindness and sightedness, if blindness could be inundated with sight, and sightedness could be punctuated by blindness and non-seeing?

Over the course of my doctoral research, I spent considerable time critiquing common assumptions about sight, destabilizing sightedness, finding linkages between blindness and sight, and thinking about the fluidity of blindness and sightedness.

Disability scholars employing social approaches to blindness also offer perspectives that highlight the fluidity and constructedness of these categories. For example, Julia Rodas writes that blindness and sightedness exist on a continuum, "with such myriad gradations and such a jumbled diversity of seeing and not-seeing that it becomes virtually impossible to put a finger on one point and to declare, 'There! This person is sighted, and that one is blind" (2009, 117). She suggests that we redefine our understanding of the relationship between blindness and vision by contending that:

The range of blind experience, like the range of visual experience, is infinitely diverse. And most importantly, these sets of experiences are not divided from one another, each belonging to its own kind. Without recourse to metaphor, we are permitted to speak of blind sightedness and of sighted blindness, a medley of seeing and not seeing, indefinite, undisciplined, indivisible. (Ibid., 119)



Figure XVI: Cheikhna Practices Driving a Vehicle Photo by Saquib Usman

Affirming Blind Alterity

As I thought about the fluidity of sightedness and blindness as categories, I wondered whether there was any essential difference between sightedness and blindness at all. On one occasion, I had the opportunity to test these ideas of fluidity with blind and sighted interlocutors living in Dali Gimba by flipping the joke that was often lobbed on me.

One afternoon in Dali Gimba, while taking refuge from the heat of midday sun in the mbār of Muhammad Mahmud, a sudden rifle blast echoed from the compound's northern end. Young men shouted out reassurances, informing everyone that it was merely Cheikhna, the son of Muhammad Mahmud, who was practicing firing the rifle. Laughter ensued when Cheikhna's name was mentioned because the young man was notorious for attempting activities that were strange and unthinkable for a blind person to perform, such as driving cars, sprinting, or shooting rifles. Someone quipped at the irony, "A blind man shooting a gun!" eliciting more laughter. Blind villagers in Dali Gimba do many things, but shooting guns is not typically one of them.

I seized the humorous moment and playfully countered by with the question, "Well *is* Cheikhna blind? —Can he not *see* things? Perhaps he is sighted?" To my surprise, the joke fell flat and nobody laughed. I backed up and tried to repair my attempt. I shared my recent observations of the overlapping domains of sightedness and blindness in Dali Gimba and my own experiences. I told them about the ideas coming out of disability studies that suggest thinking about how blindness and sightedness exist on a spectrum and the futility of distinguishing between the two in any particular way. And finally, I asked them, "Is there any real difference between blindness and sightedness? — Cheikhna does so many things that the sighted do, so how do we really *know* that he or any one person is blind?"

Everyone present gave quizzical looks. One man named Abdullah shook his head and responded by citing a Qur'anic phrase,

wa mā yastawī al-`amā wa al-baṣīr "And not equal are the one who is blind and the one who is seeing."

Before delving further, understanding this reference is crucial.¹¹⁸ This wording was an often-cited principle in Dail Gimba. It is found used in three verses. The first occurs in Surah $F\bar{a}tir$:

And not equal are the blind and the seeing; Nor are the darknesses and the light; Nor are the shade and the scorching heat of the sun. Nor equal are the living and the dead. Indeed,

¹¹⁸ People in the Saharan West frequently memorized and cited segments of Qur'anic text in an indexical fashion, by listing all instances of a given word or phrase throughout the text. Although they frequently cited verses expressively in everyday contexts, they often avoided offering any kind of explanation or exegesis about the meaning of the verses. Even for verses with the most ordinary Arabic, or apparent meanings, people would defer to authoritative exegetes (*mufassirūn*).

Indeed, Allah alone makes whoever He wills hear, and you can never make those in the graves hear. (35:19-22) And again, in Surah *Ghāfir*:

And not equal are the one who is blind and the one who is seeing, and [not equal] are those who believe and work righteous deeds and those who do evil. (40:58)

Finally, the phrase also appears in form of an interrogative in another verse from Surah *Ra*^{*i*}*d*:

Say, "*Can the blind and the sighted be equal?* Or can darkness and light be equal?" Or have they associated with Allah partners who 'supposedly' produced a creation like His, leaving them confused between the two creations? Say, "Allah is the Creator of all things, and He is the One, the Supreme. (13:16)

Blindness is a common motif throughout the Qur'an. These Qur'anic verses specifically

address the question of blindness and sightedness and construct blind alterity as one of the

fundamental binaries of life and an emblem of the concept of alterity itself. The first verse

identifies the difference between blindness and sightedness as something sensible and observable

in the world, like light and darkness. The second verse likens the opposition between blindness

and sight to the moral polarity of good and evil. The third verse approaches the difference

between blindness and sight as a question of faith.

Elsewhere in the Qur'an, there is a verse (22:46) that explicitly specifies that the mention

of blindness in the text signifies a blindness of the hearts, and not a blindness of the eyes,

"Lo! It is not the eyes in the head that go blind rather what goes blind are the hearts that are in the bosoms." (22:46)

This verse is often cited to allude to the Qur'an's use of the symbolic meaning of blindness "of the heart." However, for Dali Gimbans, the quoted verses further above were used to affirm blind alterity in the literal or physical sense of blindness and sightedness "of the eyes" as well. Abdullah continued after citing the verse, "As for Cheikhna? Of course, he is blind! He can't see anything (*ma yashūfsh sibba*)¹¹⁹— Look at his legs! The wounds. You see, these are the legs of a blind person." Cheikhna, who had just walked into the mbār, heard the invitation and came towards me. He lifted up his *sarwāl* pants to expose his calf and began to swipe across a network of keloidal scars on its surface with his hand, and traced other more fresh gashes on his feet, ankles, and shins with his finger. These injuries came from hazards in navigating the valley spaces in the bādiya. Many species of trees in the region contain branches lined with sharp needle-like thorns (*shawgāt*) that pierce through sandals and often become splinters in the heel. These branches are strewn across the landscape and in pathways and are difficult to avoid, especially without adequate vision. There was another laceration running laterally across one of his calves. I recalled when it happened, a week earlier, when he ran his shin into the edge of an iron bed frame that was left in an unusual location on the compound.¹²⁰ Although the blind were typically adept at navigating the village space, they were still prone to frequent injuries.

Certainly, these injuries were not exclusive to the blind in the village community. Nearly everyone gets a thorn lodged in their feet sooner or later and dislodging them becomes an important practice of interdependent care.¹²¹ They are particularly difficult to avoid at night. My own feet were mangled until I got accustomed to walking in the Saharo-Sahelian terrain.

For blind Ummārīs, scarring on their legs, in excess and regularity, are bodily signs that provide material evidence of blind life. Cheikhna's eagerness to show me his calf also reflected a

¹¹⁹ The word "*sibba*," means "anything," but is often expressed as a superlative. This comment does not imply that Cheikhna literally sees nothing.

¹²⁰ Although the badiya environment was recognized for its dangers of navigation, especially for the blind, it was not considered as dangerous as metropolitan spaces such as Nouakchott, where the hazards of navigation could easily lead to truly damaging injuries such as falling off staircases, getting hit by cars, or being robbed.

¹²¹ Because of shawgāt, tweezers were another hot commodity in the bādiya world. I brought many with me and distributed them. Dislodging shawgāt is a practice of care typically undertaken with the assistance of another person, preferably with someone who has acute near vision or tactile sensitivity needed to locate and extract the splinter. During my fieldwork in Dali Gimba, extracting them from villagers' feet became one of my regular functions.

common Ummārī sense of pride in their scars. They were bodily markings that identified a person as being blind and showed belongingness to the special inheritance of the Ummārī karāma. As he loosened his pant leg back down, Cheikhna said, "That is the life of the blind (*hayāt al-'umīy*)." It that the man cited scars on the legs as physical signs of blindness, when perhaps a more obvious choice might have been his eyes, where blindness is often imagined to reside. However, by attending to these scars as the sign of blindness, the man points to the material signs of living a blind life.

A short while later, Muhammad Mahmud began his ascent from the mbār and headed outside. He stopped at the door to slip on a pair of sandals there and departed. A few moments later, Abdullah who could not find his sandals ran outside and shouted, "Oh gray-haired blind man (*shaybān al-'āma*)! You have taken my sandals!" He then swung around to me, grabbed my hand, and exclaimed, "You see! They are certainly blind! *Wallahi*!"— to which the mbār erupted in laughter once again.

Muhammad Mahmud sauntered back to the mbār to return the sandals to the man. As he kicked them off his feet, he threw his hands in the air and said in repetition,

laysā `ala al-`ama ḥarajan! "There is no blame on the blind."

This phrase was another citation from the Qur'an, in a verse (48:17) that absolves the blind (*a 'mā*), the crippled (*a 'raj*), and the sick (*marīd*) from "blame" (*haraj*). The ayah is usually interpreted by exegetes and translators to relieve these categories of people specifically from the moral obligation of responding to the call for righteous battle (*jihād*) or war (Yusuf Ali 2021, 1580). However, blind people in Dali Gimba regularly invoked the words to vindicate themselves from situations of social *faux pas*, accidents, miscommunications, invasions of privacy, transgressions, or clumsiness in a light and humorous way.

Semiotic Approach to Blind Alterity

The humorous anecdote recounted above illustrates a number of insights about blindness and sightedness, especially as they are understood in local contexts in Dali Gimba. For one, it demonstrates that even though the lines between sightedness and blindness may be critiqued and destabilized, distinction between them was significantly meaningful. As was also shown in Chapter Three, for the people of Dali Gimba, the distinction is particularly real and essential, and it serves as an important sign of differentiation. If blindness and sightedness are not equal, then what are they? What is the nature of blind alterity? What is the distinction between the two?

Part of the difficulty in defining blindness has to do with language and semantic structures. It is perhaps somewhat strange for blindness to be opposed to sightedness, because seeing is an action. Semantically, the word "blind" in English is often understood as a past participle, of the completed action being "blinded," of sight being obliterated.¹²² A *blind* person is someone who has been *blinded*. In this sense, blindness is defined as the removal of sight, if not chronologically, then at least conceptually. A blind person is someone removed of sight. This view of blindness and sight as antithesis is articulated in the view of Elkens, "[S]ight and blindness are like white and black or on and off: they are opposites, and when sight is working, blindness. This incongruence is evident when attempting to place the two categories in analogical relation: If blind people are blinded to sight? If sighted people *see*, then what do the blind do? Do they simply not see, or do they see something else? If sighted people possess sight or vision, then what do blind people possess?

¹²² Etymologically, in Old English, the meaning of blind as "confused," or "not directed or controlled by reason," appears earlier than the meaning of blindness as "sightless."

It is clear that blindness and sight are diametrically or relationally defined categories, but what is the nature of their opposition? The Qur'an affirms the alterity of blindness, but what is the nature of that alterity? Is blindness an *absence* of sight or vision, as often suggested? Does it constitute a *lack*? Or could it be something else? Against what field of vision is blindness contrasted to sightedness? Given these difficulties in determining the meaning of blindness, in this analysis I assume a type of semiotic approach that seeks to understand how blindness emerges as an alternative style of sign interpretation.

It is important to distinguish this "semiotic" approach from those that simply assess how blindness (and sightedness) are interpreted as signs of difference. Prevailing approaches to blindness from the medical model and the social model offer competing perspectives on how blindness emerges as a sign of difference. Medical approaches interpret blindness as an objectively measurable biological condition of individual bodies. It is seen as a sign of pathological difference from the normal body. Proponents of the social model have critiqued this understanding of blindness for failing to account for how blindness is a social, cultural, and ideologically constructed category that is arbitrarily assigned to certain people. Instead, the social model takes a structuralist perception to consider "blindness," not as a natural sign of biological difference, but as a socially and culturally constructed category of meanings that is arbitrarily appended to "blind" people. The social model thus interprets blindness as a sign of difference that is less about the embodied reality of blindness or its "impairment" and focuses more on how blindness functions as a "disability," and how it is shaped by the perceptions, prejudices, and infrastructures produced by an able-bodied majority.

However, although the social model approaches blindness in the same way as any other kind of social difference, blindness bears a special kind of social difference due to its critical

association with the process of seeing, sense perception, and the processes of semiosis involved in the recognition of contrast and difference in the social field itself. Blindness is not just a signifier of social difference; it represents a distinctive style of semiosis, a different manner of attending to signs and interpreting them. Instead of examining how the world interprets blindness as a difference, this chapter instead considers how blind people interpret the world differently. The objective is to explore blind alterity, not just as a visible marker of difference, but in terms of the distinct perspective it brings to the world's interpretation.

Framing Blind Alterity as a Style of Attuning to the World

Fedwa Malti-Douglas offers crucial insights into how blind alterity shapes ways of sensing, interpreting, and interacting with the world. Malti-Douglas is a literary scholar who wrote extensively about blindness in the Arab and Islamic world (Malti-Douglas 1988, 1989). In her book, "Blindness and Autobiography: Al-Ayyam of Taha Husayn" (1988), she analyzes the genre of autobiography produced by blind authors to consider the unique role of blindness in the construction of these kinds of texts. She begins with the interesting observation that in autobiographies written by blind authors, a distinctive literary form is created in which the author and the protagonist of the text are both blind, but the narrator may or may not be blind. She finds that writing blind characters involves using special narrative techniques that produce a unique rhetorical effect. She calls this "blind writing," which she defines as a style of writing that indicates a blind or "non-visual" character. For example, she notes how in the book "Vedi," the autobiography of the blind Indian intellectual Ved Mehta, the author narrates an event from his first time in a blind school as follows:

> I heard again the clicking sound of Mr. Ras Mohun's shoes. 'Mr. Shoes,' someone said.

The boy let my hands drop. Everyone stepped back. There was an uneasy silence as the shoes clicked louder. At that moment, I realized that since I entered the boys' dormitory, I had heard the sound of no other shoes— only the sound of bare feet shuffling. (Mehta 1982, 28)

In this example, Malti-Douglas draws attention to the narrator's peculiar use of the auditory senses and cites it as an example of blind writing. She emphasizes that blind writing does not just refer to *any* use of non-visual senses, but specifically writing that uses the non-visual senses in an unusual way "that differs from their use in a normal, or visual context" (Malti-Douglas 1988, 114). For example, she explains that "[a] sighted character can hear a piece of dialogue and reply to it, thus employing his sense of hearing. But such a text would not be an example of blind writing," because such an example of the auditory is normative for sighted people (Ibid.). In contrast, in the example quoted above, narrating the arrival of a character onto the scene by drawing attention to the sound of their shoes and identifying characters in dialogue with reference to sounds they produce strike the attentive reader as a distinct way of employing the auditory.¹²³

Malti-Douglas's study of blind autobiography is useful because it offers several productive theoretical and methodological insights to begin thinking about blind alterity in terms of how the blind are attuned to the world in different ways. For example, her analysis approaches blind alterity not in terms of how blindness physically shapes, influences, and delimits practices like writing. Rather, she is interested in exploring how the life and world of the blind is evoked and how blind persons attend to the world in a marked way. Her analysis suggests that blindness is not just something that changes *what* one senses, but something that transforms *how* one

¹²³ Malti-Douglas differentiates "blind" writing from "sighted" writing, by identifying the latter as a narrative and rhetorical style that makes normal use of the visual and non-visual senses in the action of a story. She writes,

For example, the knowledge of the entry of a character into a room could be expressed in three different ways. In blind writing, we might read: "I heard him enter the room." In visual writing, by contrast, the text could tell us: "I saw him enter the room." In the third possibility, neutral writing, we might be told: "I became aware that he entered the room." (1988, 115)

senses. It does not just change the subject of dialogue or content of narration, but it also modulates the form of narration and communication. "Blind writing," as she terms it, is a *stylistic* quality or choice that reflects the blindness of a character in the writing of the text. It could theoretically be created by sighted authors.

In the following analysis, I expand on Malti-Douglas's consideration of "blind writing" to consider blind alterity in other kinds of social, communicative, and sensorial practices. I examine how physical conditions shape, but do not determine, blind ways of attending to the world. Following the analysis, I also return to critique and expand Malti-Douglas's theoretical approach to blind alterity in the conclusion.

It is important to note, also, that by framing a close examination of the idiosyncratic practices and activities of the blind, there is a risk of over-emphasizing the salience of this distinction in the flow of everyday social interactions and unintentionally amplifying the gap between the blind and the sighted. I recall situations from the early days of my fieldwork in the village that demonstrated how blind difference evaded my attention and recognition. At that time, I would spend days "deeply hanging out" and learning the basic elements of life in the bādiya village. In the evening, at the time of *dahmīs*, I would head to my mbār to record events, quotations and happenings of the day in my fieldwork diary. Sometimes, I would be able to remember these interactions with great detail, but I would forget whether participants were blind or sighted.

Ummārī Blind Alterity

Dali Gimba presents an illustrative case study to consider the intricacies of blind alterity because it presents a context in which the binary division between blindness and sight is especially emphasized there. Among the Ummār, blindness is not only a sensory condition, but is

also deeply intertwined with genealogy. As discussed in Chapter Three, inheritance of Ummārī blindness produces an internal genealogy within the larger clan that traces and proves the special inheritance of the blindness.

Ummārī blindness is congenital, which means that its experience and its distinction to sightedness emerges early in infancy. A few weeks or months after the birth of an Ummārī child, differences can be seen in the appearance of the eyes, responsiveness to light, and alternative behaviors of sensorially attending to the world. Villagers rejoice and express gratitude at the birth of any child, and they especially celebrate and show gratitude to God (*shukr*) as they gradually ascertain that a child appears to have inherited the family karāma. These children, called blind, are socialized in blind modes of conduct.

It is pertinent here to offer a note on the lexico-semantic fields of blindness. Malti-Douglass suggests that Western languages are limited in that they are semantically bound to the idea of blindness as "absence," "lack," or "obliteration" of vision. In contrast, she argues that the Arabic lexemes for blindness offer a more diverse range of expression (Ibid. 1989, 219). In Arabic, the most commonly used word to refer to the blind is *a*'*mā* (pl. '*umī*), which carries the general semantic meaning of "obscuring," or "covering" (Hans Wehr, 757). Another term that has gained more popularity among blind and disability communities in the Arabic-speaking world is *makfūf* (pl. *makfūfūn*), which is related to the idea of "restricting," or "abstaining" (Ibid., 973) from sight. Another word, *darīr* (derived from the root *da-ra-ra*, meaning to "harm") is another word for a blind person used to refer to people who were specifically blinded as a result of injury (Malti-Douglass 1989, 219). Other related terms are *a*'*war*, which refers to having one eye, and *jāhidh* which refers to someone having bulging eyes, and is often translated as being "bug-eyed."

Lastly, another crucial word that is used to denote a blind person is bassir, which in its literal sense means "seer," or "perceiver." This antiphrastic term which embodies seemingly opposite meanings alludes to the idea that blindness accommodates alternative sensory attunements and provides people with the means to differential perceptive capacities in relation to the sighted. In Dali Gimba, the blind were typically identified with the terms $a'm\bar{a}$ and $bas\bar{i}r$, and the term *makfūf* was used in limited circumstances.

Finally, although differentiation between the blind and sighted occurs early in infancy, at birth and the neo-natal period, it is not possible to determine if an Ummārī child is blind or sighted immediately after birth. During their initial weeks and months, sighted and blind infants cannot be distinguished. This is due to the fact that children who have inherited sightedness are not clearly sighted at birth. Developmentally, of all the sensory capacities to develop in the human, the sense of sight remains relatively the most underdeveloped at the time of birth. Due to this fact, congenital blindness among the Ummār contravenes and inverses the conventional notion of "blindness" as being blinded or in loss of a previously possessed sense of vision. The *'umī* of the Ummār do not *go* blind. They begin their lives as blind and remain as such throughout their lives. In fact, with the Ummār, it is sight and sightedness that is born out of blindness. Genealogically, all sighted Ummārīs are born from a blind forefather. And developmentally, a sighted child develops their visual capacities into their infancy.

Blind Ummārī Eyes

Phenotypically, blind Ummārīs present with visible nuclear cataracts that occlude the lens. The eyes of the blind develop a film across the lens which gradually opacifies and whitens as they age. This clouding of the lens disperses and obstructs light passing through it as it reaches the retina. This produces a resulting "residual" vision that is characterized by diffused light

perception, muted colors inflected with a yellowish tone, and low night vision (Brown 1993). Over time, the sclera (*işbay*), commonly referred to in English as the "whites of the eyes," takes on a bloodshot and sanguine appearance, accompanied by a glossy texture across its surface. Notably, from infancy, the eyes of blind Ummārīs exhibit nystagmus, a condition in which the eyes involuntarily and rhythmically oscillate (*taḥarrik*) during their waking hours. As one sighted villager described, "it is as if they are dreaming while they are awake."¹²⁴



Figure XVII: Blind Ummārī Eyes Photo by Saquib Usman

Blind Seeing

As with most "blind" people around the world, blindness does not exclude blind

Ummārīs from the sense of sight. A number of technical terms are used to categorize different

degrees of visual impairment and kinds of blindness in terms of how "usable" their remaining or

¹²⁴ This analogy between nystagmus and dreaming was recognized by one paper in the field of perception from 1986, which suggested "[t]hat rapid eye movements during paradoxical sleep actually represent nystagmus, the latter due to the occurrence of conflicting perceptions of bodily position in space. During rapid eye movements in sleep, the brain's perception of bodily position in a dream is opposed to the sensory perception of the dreamer's sleeping position" (DiPrete 1986).

"residual" vision is, such as having, *low vision*, being *legally blind*, *partially sighted*, or *totally blind*. The definition of many of these terms, Georgina Kleege notes, "[turns] on two specific facets of visual functioning —visual acuity and peripheral vision. In effect, blindness is determined according to a person's inability to perform two culturally significant visual activities—reading print and maneuvering unaided through space. The eyes of the law [looking at legal blindness] are not concerned with the person's ability to perceive color, light, or form" (2018, 4).

Total congenital blindness with "no light perception" (NLP) is rare, affecting an estimated 3-9 births in 10,000, or less than 10% of the world's blind population.¹²⁵ The vast majority of people who are classified or identify as "blind" retain various kinds of residual vision.¹²⁶ This residual vision is utilized differently across communities and individuals.¹²⁷ Various causes of blindness are related to distinct kinds of visual attunements.¹²⁸ For example, those with retinitis pigmentosa often retain considerable visual acuity in one or both eyes. They have "tunnel vision" with less sensitivity in their peripheral vision and night vision (Grover et. al., 1999). Glaucoma, a degenerative condition, might start with blurry vision and reduced contrast sensitivity and progress into a loss of peripheral vision in either the left or right fields of the eye, either laterally or bilaterally (Hu et al. 2014). People with macular degeneration often experience diminishing central vision, binocular scotoma, and a loss of stereopsis, or depth

¹²⁵ I thank Georgina Kleege for this information (2019).

¹²⁶ Petty draws on a more expansive notion of seeing beyond the senses to suggest that even people with no light perception engage in certain activities of seeing, such as phantom vision, or "seeing with the mind's eye" (2023).

¹²⁷ These decisions are often ideological. For example, the National Federation of the Blind (NFB) and the American Foundation for the Blind (AFB) are the two foremost organizations in the United States dedicated to "blind" and "visually impaired" individuals. They diverge considerably over the use of residual vision. The NFB advocates for a full embrace of blindness, and thus discourages the use of residual vision and encourages the use of white canes for navigation and braille for reading. The AFB on the other hand, takes an individualized approach, and is supportive of blind persons using assistive technologies such as screen readers, magnification software, and other tools, to make the most of any residual vision one might have.

¹²⁸ Disability activists typically eschew "calibrating distinctions between the totally, congenitally blind, the adventitiously blind, the visually impaired, the partially sighted and so forth, [because this] dilutes the political impact of a group of admittedly diverse individuals who nevertheless have common social, educational, and vocational goals" (Kleege 2018, 4).

perception (Verghese et. al., 2022). Other medical conditions associated with blindness may result in residual vision that perceives "floaters," double vision, glare, or sensitivity to light. Blindness, far from negating the sense of sight, introduces a nuanced spectrum of residual vision.

Ummārī Residual Vision

So how do blind Ummārīs see? How "usable" is their sight? What culturally significant activities does "residual" vision allow blind Ummārīs to perform? To begin, blind Ummārīs have different kinds of cataracts, experience different degrees of nystagmus, and thus possess a range of residual vision. This vision is also degenerative over time. Consequently, older blind Ummārīs tend to rely on residual vision less than the younger generation.

Most have the ability to discern bright lights from darkness, such as the sun, or a full moon, or artificial sources of light from phones and flashlights. Their cataracts cause a diffusion and occlusion of light that mediates a kind of vision characterized by low contrast sensitivity. Most also have the ability to identify colors, as well as large forms in the immediate landscape such as trees or buildings during daylight. These objects are apprehended as differentials of light that constitute the field of vision.¹²⁹

This example shows how Ummārī "blindness" is not simply an *absence* of sight, or a condition of not seeing. It involves perceiving gradients of light and darknesses. Vision that is blurry and glared is still an experience of sensing and seeing the visible realm. In fact, their vision could be characterized as seeing an *abundance* of light, where the light and color of forms exceed their contours and surface boundaries, and elements of the foreground merge with the background.

¹²⁹ The residual vision of the Ummār could be likened to Georgina Kleege's description of her own vision: "Forms appear amorphous with unstable outlines that seem constantly on the verge of merging into their surroundings. [...] I can make sense of the wavering forms and blurry blobs before my eyes mainly because I have a good sense of what is out there" (2018, 5).

While blind Ummārīs retain some forms of vision, the usability of this residual vision is limited. Generally, they are unable to recognize most objects, detect motion, or discern many standard visual cues. For instance, even in the best lighting conditions, they cannot not determine how many fingers are held up before them. They are unresponsive to facial expressions, do not engage dynamically with eye contact, and do not notice gestures of their interlocuters. Young locals in Dali Gimba would often test these visual conditions through playful pranks.¹³⁰ A common trick among youth involve pretending to strike another person's face, halting their hand just shy of making contact to see if the other person reacts defensively. Usually, the reaction comes belatedly or not at all. Another notable limitation is the inability to discern written text, or the quality of being "unlettered." This specific constraint is a pivotal criterion of blind identity, as I will discuss further below.

Seeing Light and Seeing in Light

The distinct nature of Ummārī blindness fosters a particular kind of residual vision—one where the perception of light is not just a medium but a primary sensory experience. Standard accounts of perception, as noted by researchers such as Edensor (2013), Gibson (1979), and Ingold (2000, 2005), treat light as a conduit enabling sight to discern objects, and characterize it as a medium or means through which sight perceives objects. Thus, in Tim Ingold's phenomenological study of visual perception and the weather, he begins with the premise that, "[t]hough we do not see light, we do see in light" (2005: 97).

However, for blind Ummārīs, the perception of light is primary to seeing. Instead of perceiving a world populated by distinct forms within the visual field, they perceive gradations

¹³⁰ Such pranks were not exclusive to the blind. Sighted individuals were also targeted particularly in low light conditions, like the darkness of the night, or while barricaded in a dār during a torrential rainstorm.

and variations of light that relate to major objects within the landscape. As Karis Jade Petty observes a study of people with cataracts, "[1]ight was often the subject, as much as the medium, of seeing" (Petty 2021, 7). The ability to perceive light generally also ensures that blind Ummārīs retained the visual sensitivity needed to entrain their eyes to the illumination of the day and maintain their circadian rhythms that are regulated by light exposure to the eyes and that synchronize the body's "internal clock," and link it to the external environment endocrinologically. Although this type of photosensitivity does not enable the perception of clear images and forms, it is undeniably a sensory process crucial to the person's ability to perceive and respond to visual elements in the environment.

Nystagmus

Nystagmus also lends distinctive characteristics to the residual vision of blind Ummārīs. Continual movement of the eyes produces a dynamic gaze that gives blind Ummārīs a mild experience of "oscillopsia," a condition in which objects in the visual field or the environment itself are perceived to be constantly shifting, or in movement.¹³¹ The intensity of nystagmoid ambulation can fluctuate based on psychological changes, such as stress, a headache, or hunger, and can also be influenced by assuming certain positions of the body and concentrating. This practice is necessary for enhancing forms of detailed and distant residual vision.

Detailed Sight

Younger blind Ummārīs occasionally employed their residual vision for close-up detailed observation of objects. To do this, it is crucial to minimize the amplitude of the nystagmoid

¹³¹ As people with congenital nystagmus, blind Ummārī experiences of oscillopsia are not as pronounced as people with lateonset nystagmus (Straube et. al., 2011).

rhythms of their eyes by assuming a position that has been referred to as the "null point" (Petty 2023, 8) or "null zone" (Kraft and Irving 2004). This posture calms the nystagmoid movements of the eyes and maximizes visual acuity. Even when adopting this posture, some people still experience strabismus, or a misalignment of the eyes.

How this is achieved varies for different individuals. Cheikhna, for instance, bowed his head forward and tilted it to the side, through a forward and lateral flexion. Next, he would bring the object that he sought to observe in detail within a few centimeters of the right eye, held above and off-center in relation to his direct line of vision. He would then wobble the object back and forth to concentrate on the visual qualities of the object and observe them in detail.

Limited contrast sensitivity causes forms and objects to blur together. As such, detailed vision is not always useful for apprehending forms, except for perhaps discerning their color. However, smartphones, which have their own light sources, allow some blind Ummārīs to adequately distinguish between elements on its digital interface.



Figure XVIII: Techniques of Detailed Seeing Photo by Ahmed Usman

Cheikhna was notably adept with smartphones. Using techniques of detailed observation, he was able to navigate through his phone, dial numbers, send and receive voice notes on WhatsApp, take and send photographs, or share and play audio and visual media via Bluetooth transfers. He preferred using this technique rather than use the voice-activated accessibility functions of the phone.¹³² While he could navigate his smartphone's user interface using his residual vision, discerning between photos or reading text, no matter the size, remained beyond his ability. He might inspect images on his phone for their colors but would not linger on them.

¹³² The market of smartphones in Mauritania is dominated by Android devices, but Android phones are often regarded as inferior to iPhones in terms of accessibility for the blind and visually impaired. One study found that 86% of blind participants preferred iOS devices over Android (Morris and Mueller 76). Furthermore, many advanced accessibility features, like "VoiceOver," require an active internet connection, which is a rarity for smartphone users in the bādiya.

Divergent Sensory Habits

Not only do blind Ummārīs have differential capacities of residual vision, but they also have varying attitudes and habits regarding its proper use unrelated to physical capacities. For example, two of Cheikhna's sisters seldom used their residual vision for detailed observation. One sister said that her residual vision did not allow her to differentiate elements on smartphone interfaces. The other informed me that she was capable of discerning the elements but did not find it enjoyable or preferable. In fact, Cheikhna was one of the few blind Ummārīs who kept a smartphone. The majority of blind Ummārīs instead preferred using only older "non-smart" (*ghaīr a'qlī*) brick mobile phones which, with their built-in tactile buttons, offered easy navigation through touch and auditory cues.

Seeing from Beyond the Eyes

Do we ever see the seer? Who sees when one sees? The Friend looks at me through the eyes of the strangers saying you are not alone. The people themselves do not seem to know who is looking through their eyes. Does a window know who looks through it? Ah! Those eyes! I salute the Invisible Friend! (Askari 1991, 49)

Seeing is often assimilated to the notion of "eyesight," but is also a used as a synecdoche to refer to perception and understanding more broadly. The activities of seeing and visual perception are processes that extend beyond the activities of the eyes. Even a cursory investigation into seeing demonstrates the heterogeneity and punctuated nature of seeing and the variety of blindnesses that are always present in the operation of sight.

The language of seeing encapsulates broader processes of perception, awareness, interpretation, imagination, memory, and divination. In Arabic, a number of terms are used to refer to seeing and its various functions as a sensory, perceptive, and communicative act. Seeing is most commonly referred to as $ru \dot{y}\bar{a}$, which could refer to the literal vision of the eyes but is

also readily used to denote a more general kind of perception not limited to vision. For example, it is common to say, "I saw $(ra^{a}a\bar{t}t\bar{u})$ so-and-so," to indicate that one has spoken with another person over the phone. Ru'ya also refers to seeing in dream visions.

The eyesight is often referred to as *başar*. This is the term that is most often used to describe a sighted person (*mubşir*), in addition to (*shā 'if*). Seeing is also practiced as *nadhar*, which means to actively look, gaze, or observe. This is an act of orienting the body towards something, directing one's attention, objectifying, and discriminating. Eyes have capacities of multiple kinds of vision, which correspond to different kinds of blindnesses. There is night vision that corresponds to night blindness ($a 'm\bar{a} al-layl\bar{i}$), and the seeing of color which corresponds to colorblindness ($a 'm\bar{a} al-lawn\bar{i}$).

The eyes are not the only bodily organs that are involved in the sensory and perceptive processes of seeing. For example, in contrast to the ordinary vision of the eyes (*başar*), there is the sense of *başīra*, or seeing with the heart (*qalb*), a privileged skill that allows seers to peer into invisible spirit domains and the inner realities of things and people, such as their underlying intentions. In Islamic and Sufi discourses, the heart is an organ that is associated not only with sentiment or feeling, but also with sensation and perception (Rustom 2008), active imagination (*khayāl*) (Ibn 'Arabī 1981, 119–25; Corbin 1958, 161–83), consciousness, memory, knowledge, faith, and contemplation (Amir-Moezzi, 261–8). Individuals possess differing abilities of başīra according to their level of faith (*tawhīd*), righteousness (*taqwa*), spiritual purity of their hearts (*ikhlāş*), and degree of abstention or indifference to the world (*zuhd*).

There is additionally the perceptual practice of *ilhām*, which refers to inspired or intuitive visionary experiences. This was evoked by Cheikhna when interpreting his ability to play Miriyas. There is also the process of *idrāk*, which refers to the cumulative process of perception

and awareness drawn together from various sources. Another agentive and intentional act of seeing is *shahāda*, which can be translated as "bearing witness" (or additionally meaning martyrdom), and the related term *shāhada*, which means to "watch" and is used, for example, in the case of "watching" a TV show. Another intensive form of seeing comes as *murāqaba*, which refers to monitoring or surveilling, which is a term often used in Sufi discourses to refer to a kind of mindfulness. These various perceptive processes are not only represented through the language of seeing and vision, but they often overlay the process of seeing with the eyes.

Moreover, it is methodologically difficult to distinguish the domain of the visual from other sensory domains in activities of attuning to the world, because awareness and experience of the world draw from a wide range of "intersensorial" practices. Blind Ummārīs leverage their residual vision, but never in exclusion from other modes of sensing, and always in concert with other perceptual and interpretive processes. Petty suggests that instead of compartmentalizing experiences into discrete senses, expanding the focus from vision to "activities of seeing" allows for an appreciation for how "perceptual experience is afforded by and specific to the changing and biographically constituted capacities of the perceiver within the environment" (Petty 2021).

A myopic view of blindness that identifies it as an absolute absence of vision, combined with a bias of prioritizing the visual tends to overshadow the nuanced, multisensory basis of perception. This misapprehension of sight possibly explains why sighted individuals so often doubt, disbelieve, or question the authenticity of the blind upon encountering them and observing them as perceiving subjects that act in the world. Numerous blind authors have written about this skeptical tendency from their own experiences (Hull 1990, 67-69; Kleege 2018). Omansky writes that this phenomenon of doubting blindness is pronounced among partially blind people, who are "often accused of fraud because they act too sighted" (2011, 5). Dali Gimbans too were

sensitive to suspicion regarding the authenticity or true nature of their blindness, especially by sighted outsiders who would encounter them engaging effectively in the world or using their residual vision, or by rationalist minded people who doubted the authenticity of their karāma. This sensitivity was likely a contributing factor to the failure of my joke questioning Cheikhna's blindness narrated at the beginning of this chapter.

Blind Stargazing

As a blind man, one of the most remarkable skills that Muhammad Mahmud had was in astronomy. I first asked him about the stars and navigating in the Sahara during a conversation that took place at dawn, while walking together. He told me that he "had some knowledge of the stars, and learned some of their names." He extended his arm and pointed towards the eastern (*tal*) horizon, and asked me, "Do you not see any of *Simāk* there?" He told me that the star had its helical rising (*shurūq al-najmī*) at this part of the year (in the beginning of the winter *shīta* season), which meant that it briefly appeared in the eastern sky at dawn. He shared a Hassaniyya poem that told of this phenomenon:

illayn yuṭlau` as-simāk yamūt al-ʿakʿaka wa yaqil a ʿlā l-ma` l-lukāk

When al-Simāk ascends, the insects die and the water for drinking diminishes.

I scrutinized the sky and struggled to ascertain which star Muhammad Mahmud may have been referring to. I let go of his hand to take out my mobile phone and use my Sky Guide app to scan the area of the sky. It appeared that the star he was indicating was called Spica in Latin. In the eastern horizon, however, it was rendered invisible to the eye because its light was overwhelmed by the sun which had begun to rise in the eastern sky. He also pointed to the north (*sāhil*) horizon and indicated the location of Polaris there. Only one or two of the brightest stars of the Saharan night sky were, on rare occasions, ever recognizable for blind Ummārīs. Typically, the stars were never visible to blind Ummārīs. Instead, Muhammad Mahmud's awareness of the star cluster's position and its potential visibility was gathered through alternative sensory modes, spatial and temporal awareness, intuition, and acquired knowledge about the stars and their movements.

Muhammad Mahmud's example of "stargazing" shows how acts of blind seeing are constituted by sensory awareness of visual signs that critically draw on discursive knowledge. Conceptions of sensation from the field of perception commonly frame knowledge of the sensory world as a product of sensory perception, i.e., *we know what we see*. However, this example illustrates the reverse process. Knowledge of the visual phenomenon in the world drew upon *apriori* knowledge, and other "non-visual" forms of multisensory experiences, i.e., *we see what we know*. Muhammad Mahmud expressed this idea by stating that, "for some people, seeing precedes hearing—while for others, hearing precedes seeing." This example further questions whether knowledge itself could be considered another sense, alongside seeing, hearing, and others.

Besides the stars (*nujūm*), blind Ummārīs also had a unique capacity to directly observe the sun. On one occasion, I was with five sighted boys and Cheikhna, standing in a circle under the midday sun. Due to the intensity of the sunlight, the sighted boys and I were ducking our faces away from the sun, using our hands as visors on our foreheads to cover our eyes and squinting to block out the light. I noticed that the sighted participants in the conversation were fidgeting, frequently tilting our heads and leaning, struggling to find a comfortable angle for establishing eye-contact with the speaker. Cheikhna, who stood in the circle unaffected by the

midday sun, also noticed the awkward dance we were caught in, and laughed at our predicament. I asked him, "Cheikhna, the sunlight doesn't bother you?"

He said, "No *wallahī*—I can look at the sun—no problem."

He demonstrated his claim by turning to stare directly at the sun, unflinchingly, with his eyes wide open. Concerned for his well-being, I entreated him to look away.

He was amused, "you all sighted truly cannot look at the sun?" I admitted my incapacity and told him that I felt compelled by impulse to divert my gaze. Another boy curiously probed, "Cheikhna, how does it appear?"

He replied, "It is beautiful."

Shame and Visibility

Blind Ummārīs navigate their social world by seeing through the eyes of others. From an early age, they are taught how to conduct themselves properly and effectively with sighted people in the village, and others from outside the village. One young blind villager explained how she had been taught to face towards sighted people's faces in conversation and simulate eye-contact. Another example she gave was to avoid picking one's nose in front of others. Many of these recommendations, however, were only emphasized for interactions with sighted people from outside the village or when visiting distant locales like Nouakchott. Sighted people living in Dali Gimba and its surrounding villages and even in larger towns in the Hodh and in the major city of Timbedra were familiar with the Ummār. Blind Dali Gimbans felt a degree of comfort around them.

In the Saharan West, the dynamics of visibility play a fundamental role in the maintenance of social relationships, the divisions between public and private domains of social space, gender, age, and other hierarchical social structures. Central to these dynamics is the principle of *saḥwa*, which is a Hassaniyya word that could be translated as shame or shyness, or embarrassment.¹³³ Saḥwa is crucial for both men and women.

For a man, sahwa dictates how one presents themselves and proscribes the actions that one conducts in the field of vision of older men, especially one's older brothers, father, other paternal kin, and most of all, one's father-in-law. I first learned about sahwa when I asked a sighted Ummārī man in his 30s how his children were doing in the presence of his father who was also in the room. The young man immediately turned uncomfortable and shifty. His brother, who was also present, turned to me and said "*shaṭṭap*!"—an English word that he specifically learned to privately signal to me to desist from making an awkward situation. I learned that it was embarrassing to talk about one's children in front of their father, or anything else that acknowledged marital relations.

Perhaps the most intense domain of sahwa occurs in interactions with one's father-in-law. Married men not only avoided coming into view of their fathers-in-law, but they also made great efforts to avoid ever being in the same place as them. As Lila Abu-Lughod observes in her classic ethnography on shame and honor in Bedouin society, "Complete avoidance is the best protection; there is no danger of exposure if there is no interaction" (Abu-Lughod 1986, 115).

In one case, the wife of a young man from Dali Gimba fell ill with a stomach problem that local clinics in the Hodh could not resolve and she required a higher level of medical attention. Although Bamako was considered to have better medical care for this kind of illness, the man's father-in-law was living there, and he felt compelled to avoid it at all costs. Instead, he took his wife to Nouakchott, which was twice as far and a grueling journey compared to the trip to Bamako.

¹³³ The word is also found in classical Arabic, in the word *istahya*.

One young Dali Gimban man who worked in the Ivory Coast for most of the year asked me if it was true what he saw on television, that people in the West would actually dine with their in-laws? When I replied in the affirmative and informed him that in fact, I frequently would eat dinner with my father-in-law—and that this was actually considered a positive thing for our relationship—everyone listening burst into laughter.

Villagers believed that although the logic of saḥwa was universal, its particular norms and customs (*`urf*) differed by society. For example, they were well aware of the variety of customs within the Saharan West geographically and ethnically, and also familiar with how North African peoples (*maghāriba*) had distinct customs regarding saḥwa. Some badiya dwellers would often temper claims of morality stemming from violations of saḥwa by cautioning each other to consider how their own customs differed from that of the Prophet Muhammad, who is the paragon of exemplary practice (*sunnah*). For example, Muhammad Mahmud told people that the Prophet Muhammad was said to rest his head on the thigh of his daughter Fatima, while her husband Ali would rest his head on her other thigh.

For a woman, *saḥwa* also influenced personal behavior with a range of men and found its most exaggerated form in the relationship with one's father-in-law. With the formally "patrilocal" cultural norms of the Saharan West, women did not always have the ability to entirely avoid their father-in-law. Instead of avoidance, saḥwa in this case called for acting in an especially reserved manner. For example, one important role for a daughter-in-law is to prepare tea for her father-in-law on one of the various tea sessions held throughout the day. Tea would be distributed to everyone else present, but for this session, her husband (the son of the father) in particular was sure to disappear.

For a newlywed bride who has recently moved to the village of her husband, it may be several months before she exchanges anything beyond a quick greeting of *salām* with her father-in-law. She would typically set up her tea preparation station on the opposite side of the mbār. While preparing the tea on this occasion, she might bite down the edge of their *milehfa* (pl. *milehfāt*) dress to cover a part of her face. After preparing her father-in-law's cup of tea, she would try to pass the glass to someone else to hand to him. Importantly, saḥwa was not static. Over the course of years, the relationship between daughters-in-law and fathers-in-law would gradually become more proximate, directly communicative, cordial, and even conducive to joking.

Sahwa is also instrumental in proscribing interactions and encouraging avoidance between husband and wife during the daytime. They remained distant within their own households which were open and visible, during the days, or in other areas. Sometimes spouses would call each other on the phone when they needed to speak to avoid the embarrassment of sahwa. Women preparing tea would avoid handing teacups directly to their husbands, and find a proxy, even if it was impractical. A woman would instead interact, communicate, and joke with other women and men present, such as her husband's brothers, other visitors, or even with me, but remain uncommunicative and seemingly cold with her own husband who may also be present. This example shows how sahwa operated through individual relationships such as through marriage, and not just through general relationships between social classes.

Finally, smoking is another activity that is significantly regulated by the demands of saḥwa. Young men took care not to smoke in view of older men, such as their older brothers, uncles, or their fathers. Young men did not mind smoking in front of women such as their sisters, or even their mothers. Smoking itself, or being identified as someone who smokes, was not seen

as morally problematic for men. Rather, its valence appeared through its proper etiquette. Younger men were expected to put out their cigarettes if an older man was to enter into their presence. When a younger man would do this, it would be interpreted as a positive gesture of respect (*iḥtirām*) and honor (*karam*) for both parties. Once, a blind young man was smoking and his older brother entered the room, however the young man did not recognize him for some time. After a few moments, the older man spoke up with an affront, "You smoke—and *I* am in front you?" Upon recognizing the voice, the young man quickly put out his cigarette, and said the offrepeated phrase mentioned earlier, "There is no blame on the blind!" It is commonly known that the performance of saḥwa, veiling, and shame is strongly linked to visibility. However, interactions with the blind demonstrated that this notion of visibility was less about the practical possibility of being physically seen, and more about being in the line of sight or in the presence of the person for whom one is performing saḥwa.

The performance of sahwa for older blind men did not differ from that of sighted men. Daughter-in-laws serving their blind father-in-laws tea were demure, covering their faces by biting onto a tuft of their *milehfāt*. In another situation, I sat with a young blind man on the southwestern corner of the porch of an mbār. He took out a cigarette to smoke, but he was aware that his blind father was still present on another mbār on the compound. He asked me, "Do you see *Bibby* from here?" I looked towards the southeast direction across the property and told him that I could see him, nearly fifty meters away, sitting on the porch of his mbār. The young man readjusted himself a few feet towards the western end of the porch, out of the direct line of sight of his father and lit up his cigarette.

I noticed that a wind was blowing from the north and asked him if he was concerned that the smell of his smoke would reach his father. Not only did his father have a strong sense of

smell, but the young man was also the only smoker in the household, so the odor would immediately be linked to him. The young man, however, did not mind if the smell of the smoke reached his father. He told me that smelling smoke or smelling like smoke did not breech the demands of saḥwa. At nighttime, when villagers set up sleeping arrangements, care is taken to position various families on a compound out of the line of sight from one another, even when visibility is limited by the darknesses of the night. These examples show that values of shame and saḥwa primarily concerned the spatial arrangement of being in view *theoretically*, and not necessarily about the actual potential of being seen or sensed in general.

One Dali Gimban man further elucidated this relationship between shame and visibility through a story of the prophet Muhammad that is recorded in the hadith collection of *al-Tirmidhi*. The story is narrated by Umm Salama (d.~680), who was a wife of the prophet Muhammad:

We were with the Messenger of Allah, blessings be upon him and peace, when [Abdullah] ibn Ummī Maktūm [a blind man] was given permission to enter. So, he entered. And that was after we were commanded [by the Qur'an] to veil (*al-hijāb*). The messenger, blessings be upon him and peace said, "Veil (*iḥtajibā*) from him." I said, "Oh Messenger of Allah, is he not blind ($a m\bar{a}$)? He does not see us (*yubṣirūna*) and he does not recognize us (*ya'rifuna*)." The Prophet said, "Are you blind such that you cannot see him?"¹³⁴

The villager explained that this hadith clarified that the injunction to veil for women extended to blind men. The prophet denies Umm Salama's presumption that the criteria for veiling are being seen and recognized. Although veiling ($hij\bar{a}b$) for women is often characterized as a form of protection from the male gaze, as something that "extracts" a woman from the "spectrum of the [male] gaze" (Ragland 2008, 13), or something that occludes the masculine fetishization of women's bodies (Krips 2008), this hadith of Umm Salama inverts the traditional structure of the

¹³⁴ Jami` at-Tirmidhi 2778, Bk. 43, Hadith 48.

gaze and the veil, and decouples the processes of being seen and seeing which are typically understood to be reciprocal.

The hadith suggests that veiling has less to do with the actual potential of being seen. Rather, it is more concerned with the awareness of another person in one's presence or facing them in a direct line.¹³⁵ In the hadith, it is not the potential of the gaze of the male on the body of the woman that generates the injunction to veil, but the female viewing of the male and the recognition of his co-presence that is considered salient in the act of veiling.¹³⁶ It is the woman's gaze of the man, rather than the male gaze on the woman, that is considered salient in the act of veiling.

To note, this understanding of the gaze and visibility conflicts with other understandings of blindness that derive practical value in blindness to suspend ordinary demands of shame and sahwa. One example of this alternative view is found in the blind social role of the mu'adhdhin in places like Cairo (described in Chapter One), because their blindness prevented them from violating the privacy of homes. In Dali Gimba, I saw this contradictory social positioning of blindness in numerous sites. At times, blindness queered individuals, while at other times it reiterated dominant gender norms. Younger blind Ummārī men sometimes informed me that women felt comfortable interacting with them in ways that they would not normally do with other men, such as changing clothes in front of them or talking to them about their desires to marry, menstrual cycles, or pregnancy. These same young men, however, might articulate views about gender segregation, veiling, or the dangers of the gaze that are notably more intense than

¹³⁵ Another interpretation of the hadith might be that the Prophet was suggesting that the blind man be treated with the same respect as a sighted man, or that the women veil out of respect for the Prophet, who was also present. However, the Prophet's indication to Umm Salama to regard her sight of the man (rather than for example asking her to see his own presence), implies that her awareness and sighting of the man was the criteria that called for veiling.

 $^{^{136}}$ Similarly, I recall that my paternal grandmother Muhammadi Bano (b.1930) would regularly don her *dupattā* (scarf) over her head whenever a man would appear on the television in her living room.

sighted men. This perhaps stems from the discursive basis of gender norms. Patrick White comments that, "Blind people are in a sense queer, in that heterosexuality, at least in its institutionalized forms, presumes a sighted subject" (2003, 134).

These accounts expand the notion of seeing beyond its basic form of eyesight to other forms of seeing beyond the eyes. They also indicate how blindness provides a privileged theoretical space to reconsider questions about visibility, the gaze, gender, sexuality, and selfimage, and identity.

Blind Navigation, Walking, and Running

Muhammad Mahmud fondly remembered traversing vast distances across the Saharan bādiya during his youth in nomadic times. He told me:

When I was a youth, a long time ago, I used to travel a lot—by myself. I would cover kilometer after kilometer of the earth until I would reach my destination. And I did not have a single other soul with me. Once in my youth, I walked to Timbedra by myself—you must hear the story one day.

Although many blind Ummārīs like the old shaykh recalled riding animals such as horses and donkeys, Muhammad Mahmud reminded me that the iconic symbol of nomadic life was actually the practice of walking. Walking (*gotrah*) was a revered activity in the bādiya world. Walking great distances was a significant mark of one's endurance and patience. Hassaniyya poetry often praises walking for its spiritual, mental, and physical benefits, specifically highlighting its impact on improving intellect and memory. More than just a means of spatial locomotion of the body, walking was also considered an edifying experience that mediated spiritual wayfaring of the soul. Older denizens of the village who experienced nomadic life prior to the 1980s sometimes nostalgically complained that sedentary life in the village removed the activity of regular

walking from daily life. They would often invoke the popular maxim, "*l-haraka baraka*" (there is blessing in movement).

By the time I conducted my fieldwork in Dali Gimba, Muhammad Mahmud was well into his 80s. He had arthritic joints and moved slowly. He also had diabetes, and in addition to taking Metformin daily and replacing sugar with sucralose pellets in his *atāy*, Muhammad Mahmud was serious about walking his 10,000 steps per day as advised by his endocrinologist in Nouakchott. He typically covered most of these steps in his morning exercise walk, heading three to four kilometers in a direction from the village and returning a couple hours later. He preferred going out alone, as he also used this time to complete reciting much of his daily portion of the Qur'an. Performing this task was considerably difficult for anyone in the bādiya, as it was often challenging to retrace one's steps and guide oneself back to the village.

Muhammad Mahmud's son, Cheikhna walked and ran much more swiftly than his father. His gait was confident. He bounced up and leaned into each step. While walking, Cheikhna used his residual vision to avoid larger obstacles such as trees and orient himself in respect to the sun. To do this, every few steps he would turn towards the side via cervical rotation, and then turn his head to the other side for the next few steps. This swaying motion allowed him to use his residual vision to scan the landscape for larger obstacles and direct his ears in ways to better localize environmental sounds.

However, it is crucial not to overstate the role of residual vision in blind walking. Most obstacles like shrubs, cattle, or thorns were not visible to blind Ummārīs. Even large objects were only visually perceptible under specific conditions of light and within a certain distance. Instead, blind walking crucially relied upon auditory cues and tactility, of the various terrain and the wind, as well as smells of things like animals, cooking, personal odors, and the soil itself.

Blind Ummārīs did not use systematic echolocation techniques that entailed intentionally making sounds such as clicks of the mouth or taps of a cane as some blind people do.

Some blind Ummārī youth are also skilled in running. Cheikhna, for example, was a frequent target of mischief and botheration by younger sighted and blind village adolescents. They would stealthily join his company, tug at his clothes, or tickle his feet during his daytime siestas to provoke him. With enough prodding, Cheikhna would eventually lose his patience and begin chasing the kids around the property, tailing after them with full force until he was able to catch them and give them a licking.

Walking is a sensory practice for the blind. Especially when navigating inside mbārs or dārs, blind Ummārīs adopt a distinctly apprehensive style of walking. Once, I was lounging on a carpet in an mbār and my glasses were left further away from me on the floor. Faṭṭimatou, a blind woman entered the mbār. I quickly alerted her about my glasses on the floor. She responded with a chuckle, "We blind—We walk feeling (*nashu'ru*) the ground with our feet, like this—." Demonstrating her technique, she slid her foot widely outward, brushing the ball of her foot across the ground before planting it. She then shifted her weight and slid the other foot forward in the same way, eventually contacting my glasses. She picked them up and handed them back to me. This same technique of walking is used outdoors to navigate through the bādiya landscape, to climb steps, avoid obstacles, and sidestep thorny branches and any trash (zbāl) strewn across the terrain.¹³⁷

This careful and sensitive manner of walking is not exclusive to the blind. It is practical for anyone traversing the terrain of the bādiya, especially in the dark. Sandals are worn loosely coming off the feet (shown at the bottom edge of Figure XIX below). This allows one to extend

¹³⁷ See also Ingold's work (2004) for a closer examination of the role of footwork in the activities of human movement and environmental perception.

tactile sensitivity beyond the body, like the white cane of the blind, so that any obstacles or danger on the path can be sensed without harming the feet. Blind walking is not just a practice of locomotion. It is a sensory activity. The gait of the blind is characterized by deliberate sensitivity and attention. It is both cautious and intrepid, calculated and exploratory. They step forward not with the presumption of knowing what will be there, but abductively, learning, predicting, and figuring out what will be there.

It is important to note that no one in Dali Gimba walked in the way that blind walking is depicted in Western classical artistic renditions of the blind. Jacques Derrida considers the drawings of Antonie Coypel (d.1722) titled "Study of the Blind" held in the Louvre, and comments that blind men "all hold their hands out in front of them, their gesture oscillating in the void between prehending, apprehending, praying, and imploring" (Derrida 1993, 5). Paintings such as these depict blind men hunched over, leaning forward, groping in the air, with facial expressions of exasperation. Actual blind people in Dali Gimba apprehend space with their feet. In and around the village, they walk confidently and with awareness, drawing on multi-sensorial perceptions.

Rodas poetically distinguishes blind walking from sighted walking:

Real blind people, the ones who make their way in the world, are applied scientists and mathematicians, constantly plotting trajectories, forming hypotheses, mapping their ground, assessing the environment. They can zip from point to point with a self-conscious self-assurance that the sighted will never possess: masterful. Given the opportunity, always get directions from a blind person. For the mobile blind know their space in a way that is literally alien to the sighted. By comparison, sighted persons are tourists in their own communities, unsure of landmarks, stopping to check street signs, never knowing exactly how many blocks from here to there, how many steps up or down, how many buildings to the corner, how many yards to the subway entrance. Sighted people are disabled by their eyes, by their seeing, relying always on that crutch that is (almost) always available. And like tourists, the sighted meander unsure of their route, scattered, stopping constantly to check their progress against that map that is the visible world. Where the blind are methodical, the sighted are random walkers, untrustworthy and undisciplined, a hazard to themselves and others. (2009, 121)



Figure XIX: Mutual Touch and Co-Walking in the Bādiya Photo by Saquib Usman

A significant aspect of blind walking in Dali Gimba is the culture of "co-walking." When two or more people of the same gender walk together, it is common for them to maintain tactile contact with one another, often by holding hands or drawing arms over shoulders such as the two photographed in Figure XIX. This practice is found with the sighted just as it is with the blind across the Saharan West and is common elsewhere in the Arab world (Khuri 2001). When a blind person walks hand in hand with the sighted, it is not only the sighted who guides the blind. Guidance is mutual, conveyed through the communication of touching. Indeed, on nights with limited visibility, those without sight often prove to be the more adept guide.

Blind Exploratory Touch (*Talammus***)**

Blind Ummārīs in Dali Gimba make generous use of exploratory touch (*talammus*) to attend to the world. In navigation, this technique regularly employs the feet. In Dali Gimba, blind Ummārīs felt at liberty to also use their hands to probe and understand their environment. Throughout my stay in the Dali Gimba, my hosts, neighbors, and children from the village frequently handled any and all of my personal belongings with abandon, inspecting items, inquiring about them, or requesting to keep them. Sighted villagers were far more reserved in this practice of exploratory touch, but still engaged in the practice. At times, this exploratory touch of delicate items would make me wince, such as when they would draw their fingers across the lens of a camera or a sharp knife.

During interviews and conversations, blind interlocutors would often nonchalantly feel out objects in our immediate space as we talked. They would trace their fingers over the pages of my notebook, flip through it, and lightly hold onto my pen as I attempted to write. They would often frequently pick up my digital recorder, investigate its contours, press all of its buttons. This is the reason why so many of my recordings are inopportunely cut off or accidentally deleted and missing. Often, the exploratory touch extended to my clothing or my body. More about this kind of touch is discussed in the section on haptic communication below.



Figure XX: Exploratory Touch in Assisting a Newborn Goat Photo by Saquib Usman

Exploratory touch is critical to a number of social activities, for both the blind and the sighted. It was especially useful in eating. Once, while dining in a Western-style restaurant in Nouakchott, a blind Ummārī man told me that eating with utensils is not appropriate (*ghayr munāsib*) for the blind, and it was better to have food that he could easily touch and handle with familiarity.

Furthermore, practices of exploratory touch are not limited to just fingers, hands, and feet. To achieve a form of exploratory touch with enhanced sensitivity, blind Ummārīs often use their lips and tongue to touch and feel finer details of certain objects. This was especially important for men and women whose hands were worn from lives of manual labor.

I recall one instance when a young blind man discovered a small plastic box placed on some of my books. When I told him that it was a sewing kit that I brought from America for his mother, he eagerly opened the box and inspected its contents. He brought one threaded needle to his mouth, then glided it meticulously across his lips and the tip of his tongue. Finally, he shouted out, "Yes—correct, correct—it is a needle and thread. This is a good gift." This kind of detailed touch was used for other objects with fine markings, such as medicines mixed in a bottle. The use of the tongue as an organ of touch blurs the boundaries between touch and taste. The young man's affirmation of my identification of the object also elucidates how exploratory touch produces a definitive knowledge of certainty. After hearing from me that the box was a sewing kit, he used the sense of touch (and taste) to be able to confirm my statement through his own discovery of its reality. This connection between touch and certainty is also found in the story of "Doubting Thomas," wherein the Apostle Thomas remained skeptical of the resurrection of Christ until he was able to touch his crucifixion wounds for himself to believe (Most 2007).

Blind Listening

Over my years as an ethnographer, I have consistently witnessed how blind people are avid listeners.¹³⁸ This capacity is especially beneficial for foreign ethnographers who arrive in the field as novices communicating in the local language. Blind interlocutors serve as excellent tutors for speaking and comprehension of a language. Interactions with the blind generate a special awareness of the aspects of language, linguistic practices, and sensorial aspects of interactional contexts. Communication with the blind requires expressing oneself through words, without resorting to handwaving or other channels of visual communication that are ordinarily taken as basic features of face-to-face communication.

¹³⁸ Some blind interlocuters have expressly disavowed having a strong sense of hearing or enhanced listening ability, especially among the non-congenitally blind. One blind young interlocuter from Morocco claimed to be "extra fucked" by his blindness because he formerly identified as a visual learner with a photographic memory. Despite this claim, I still found him to be a strong listener with recognizable attentiveness to the aural.

Muhammad Mahmud stood out as an exceptionally good listener. Our bond thrived on this shared understanding. More than anyone else, I consistently felt a deep sense of comprehension from him, as if he always understood what I was intending to communicate. It certainly helped that he was fluent in classical and modern standard Arabic, which I came to the field knowing. But the bases for his acute comprehension went beyond that. It also stemmed from culturally specific factors such as a special attentiveness to the aural, the idiosyncrasies of blind communication, channels of haptic communication through mutual touch, and regimented practices of listening intently. Additionally, numerous personal qualities of Muhammad Mahmud, such as his role as a diviner, his encyclopedic knowledge, his intuition (*ilhām*) and insight (*başīra*), linguistic dexterity, and his career as a Qur'an teacher contributed to his special capacity for aural comprehension.

In general, blind Ummārīs were especially attuned to the sonic features of the boisterous badiya landscape. They often commented and inquired about what they were hearing. Many listened to the sounds of birds, attentive to the possibility that the animals might turn to address them in communication, as mentioned in Chapter Three. After some time in the village, I too began to learn to recognize individual goats by their bleats. While bādiya dwellers were generally forgiving about many things, two things that blind Ummārīs especially disliked from sighted people was failing to listen attentively and remaining silent when engaged in an activity in their presence.

Additionally, they monitored time through the day's auditory rhythms. The passage of time in Dali Gimba is also frequently indicated by regular announcements of the time from villagers' Nokia brick phones. The ability to program a dedicated button to announce the time made these phones especially sought after in the village. In addition to the adhaān, this

announcement was a permanent feature of the soundscape in Dali Gimba. It functions as a sort of aural clock, much like bells on a striking clock or a repeater complication on a watch.

Ummārīs often enjoyed listening to Qur'anic recitation, books being read aloud, poems recited by heart, all of which are commonplace in the Saharan West. In addition to their basic brick phone, which is used for calls, many adults in the village had dedicated smartphones which they used for storing, viewing, and sharing images and audio and video media with others through Bluetooth based intranets. WhatsApp voice notes were also sent and received during intermittent bouts of internet connectivity. Personal caches of grungy low-bit-rate media might include tracks of Qur'an recitation by Mauritanian reciters, recordings of the private musical concerts of the *Iggawen* (griots), rips of YouTube videos, excerpts of television broadcasts, radio shows of folk and classical poetry performances, Islamic lectures by popular Mauritanian scholars, and montages cycling through natural landscapes, portraits, and wedding photography made by Mauritanian content creators. Smartphone users regularly play their media library on speakerphone—listening, watching, enjoying, and eventually memorizing their contents through repetition before exchanging it with new media.

Blind Ummārīs emphasize the importance of a conducive aural environment for listening. Many, for instance, were averse to loud jarring noises. This was one of the main reasons why villagers prefer life in the bādiya over life in cities like Nouakchott. When traveling together in Nouakchott, Muhammad Mahmud especially hated the sound of sirens from ambulances that periodically interrupted the soundscape of the city's busy streets, as well as honking, and loud amplifications of music from speakers. He said that these sounds were disorienting and disruptive. He claimed that such sounds were not only harmful to the aural sensitivity of the body, but also the sense of balance and one's sense of spatial awareness. They disrupted the soul

and were harmful to everyone, whether they were aware of it or not. He likened the sound of sirens to the bray of the donkey which marked the incursion of invisible demons in the shared space.

Blind Communication

In Dali Gimba, where there is a widespread presence of blindness and collective awareness of differential sensory attunements, blindness shapes communication practices among the sighted as well as the blind. Kadri and Mulyana have noted that communication studies have predominantly centered around the dynamics of sighted communication; little research has been done on the idiosyncrasies of communication with blind interlocutors (2020).

Contrary to the traditional paradigm of "face-to-face" communication, where participants are imagined facing one another, blind interlocutors adopt a different stance. They often tilt their head sideways to position their ear towards the mouth of the speaker. Although sighted communication relies heavily on non-verbal channels of eye-contact, joint-looking, facial expressions, gestural body language, and other visual cues, these sensory channels are not meaningful in communication with blind interlocutors.

Given these conditions, blind "face-to-face" communication shares some important qualities with phone conversations. In both scenarios, participants engage in an intensive form of active listening, and attend to various auditory aspects of dialogue, closely considering patterns in speech, tone variations, prosodic shifts, silences, pauses, and stutters to grasp at the meanings that emerge through communication.

Blind Linguistic Practices

In Dali Gimba, blindness shapes distinct linguistic practices. I once sat in the mbār of Shayyakh, an elderly blind man. He asked others about his son's whereabouts. A Halpulaar cowhand from Mali responded, "*Huk*!" which was a deictic signaling word meaning "over there."

Shayyakh was annoyed at the response and commented, "This is not from the speech of the blind ($kal\bar{a}m \ al-u \ m\bar{n}$)! Indeed, it is an ambiguity (*mubhama*)."

Seeking clarification, I questioned him further. He elaborated,

The blind do not like "*Huk*." It does not determine a direction. Similarly, "*ana*" (I). In the Arabic language, "ana" is called an ambiguity (*mubhama*). It has no meaning to it. It does not specify a person. Maybe you say "ana," and I do not know who you are. Instead, say "Shayyakh," or "Sākib," or "Mustafa." That is good. My father did not love "ana."

Shayyakh's comments highlight the distinct communicative norms of the "speech of the

blind." In ordinary speech of the sighted, "[d]eictic reference is accomplished through coproduction with other speakers and is accompanied by use of multi-modal signs (gestures, eye gaze), which are often crucial for interpretation" (Williams 2010, 4). However, Shayyakh explains that certain classes of deictic references to context whose meanings are reliant on visual

cues are excluded from blind speech.

Firstly, he criticizes the use of personal deixis that depends on visual recognition of a person. In place of this, he advocates for the greater use of names. When seeking to address a blind interlocutor in a conversation with multiple participants, it becomes pertinent to use a vocative expression that address them by name or establishes phatic contact through touch.

Secondly, Shayyakh excludes forms of spatial deixis that critically rely on visual cues such as pointing. When offering directions, phrases such as, "go that way," or "over there," remain ambiguous in blind communication. Another blind villager once told me, "When a blind person asks, 'Where is the water pitcher,' or 'where is so-and-so,' respond by referencing the cardinal directions. Say, 'the water pitcher is towards the north-east."

Furthermore, Shayyakh's comments not only critique these linguistic practices for their impracticality among blind interlocutors, but he also suggests that these deictic words are meaningless. Such a declaration is incisive in the Saharan West, where empty speech (*kalām* $f\bar{a}d\bar{i}$) and nonsensical or vain speech (*laghw*) are considered cardinal vices and undignified forms of talk. In contrast, being able to speak articulately, definitely, is a sign of being cultured. According to one blind Ummārī, being *muthaqqaf*—translated as "educated," "intellectual," or "cultured,"—means that, "someone has the capacity of speaking properly in any situation, using the right words." Such a manner of dignified speech that rises to the degree of *faṣāḥa* (eloquence), *bayān* (lucidity), and rhetorical prowess (*balāgha*) requires that it be free from unintentional obscurity, ambiguity, or confusion in its intended expression.

Blind Non-Verbal Communication

Although blind face-to-face communication does not incorporate many of the visual channels of communication that are ordinarily critical for sighted communication, this does not imply that blind communication relies exclusively on verbal communication or aural channels of communication.

Whereas in sighted communication eye-contact, nodding serve, and body language serve as important non-verbal means of indicating uptake and proving feedback to speech, such cues are not meaningful with blind interlocutors. Instead, blind communication places special emphasis on aurally-explicit uptake indicators. To this end, the availability of click signals in Hassaniyya speech is immensely helpful. Two distinct clicking sounds are prevalent among its speakers, a dental click which indicated negation, denial, or disapproval, and a lateral click

which indicated affirmation, approval, acknowledgement, presence, or engagement. While these signals are common among Hassaniyya speakers in general, they are especially frequent in blind communication. Besides their specific denotations, these sounds are instrumental in maintaining phatic contact between speech participants. These clicks were also important techniques to communicate one's presence without revealing one's identity.

Additionally, the explicit disavowal of deictic language does not mean that gestural communication is abandoned. Gestures are still often employed but they are coupled with an added aural dimension. For example, when Dali Gimbans point, they make sure to snap their fingers as they extend their hands outward.

Haptic Mutual Touching (*Talāmasa*)

In an earlier section, we discussed the role of exploratory touch (*talammus*) as a Ummārī technique of attending to the world. However, touch is more than just a sensory practice of perceiving the environment. Particularly with other humans and animals, touch is an important medium of communication. Mutual touching, or *talāmasa*, is a simultaneously receptive and expressive sensory activity. It is reflexive. Its subject and object are interchangeable. What you touch touches you back, in a shifting balance of emphasis.

Cultural norms in the Saharan West encourage an abundance of mutual touch and bodily intimacy. Shlomo Desen notes that "Western cultures" often avoid physical contact and body odors to a greater extent than in Mediterranean and Middle Eastern societies, and that these interactional proscriptions have profound effects on blind interactional norms and place limitations on blind accessibility to using touch (1992, 16). Unlike societies thus are generally repressive of mutual touch, in Saharan West mutual touch and physical closeness is commonplace.



Figure XXI: Mutual Touch in Dyadic Communication Photo by Saquib Usman



Figure XXII: Sociality of Prolonged Tactile Contact Photo by Saquib Usman

Very often, conversations with blind interlocutors in Dali Gimba took place with prolonged physical contact. This came in the form of prolonged holding of hands during greetings and into conversations (as depicted in Figure XXII above) or through interlocking pinkies, sitting leg-to-leg, brief massages, playing with hair, meticulously scouring for lice, applying henna, resting one's head on another's lap, laying with crisscrossing feet, clutching someone's foot or calf, feeling the texture of another person's clothes or playing with one's belt. These modes of mutual touch ranged from being bi-directional to mono directional. Avenues of prolonged contact were typical between villagers of the same gender, but it was never seen publicly between non-kin villagers of the opposite sex. It was also uncommon or marginal among siblings of the opposite gender and other "unmarriageable" (*mahram*) close blood-related kin. It was, however, common, emphasized, and prolonged among milk-siblings ($rad\bar{a}$) of the opposite gender, which included nearly all cousins and peers of an age group in the village.¹³⁹ Also, it is important to note that blind Ummārīs did not practice face-touching as a technique of identification or recognition as it was used by people like Hellen Keller. Friendly kissing of hands or heads, although common in other parts of the Arab world, is not as frequent in the Saharan West.

During conversations and interviews, I was often connected to blind interlocutors through prolonged physical contact. In their exploratory touching, they would often encounter my body parts and clothes, to investigate their textures. They would notice calluses, scars, and abnormalities and express their curiosity and suggest remedies. When they found mosquito bites on my legs, they would investigate where I might have gone to encounter them. Through qualities such as these, they learned of my physical state of being. This interactive custom was ordinary in the bādiya and emphasized among the blind.

Initially, the regularity and prolongation of mutual touching was startling to me. It often felt jarring and invasive. Dali Gimbans felt my body temperature, telling me if I was hot, or if my skin was cold and clammy. Mutual touch did not just reveal information about physical states but also crucially about emotional states. This touch-based communication allows interlocutors to gain important information about speakers. It is an interactive norm that is crucial to nonverbal elements of communication. It augments the listener's ability to know and understand the speaker and generates a vast channel of communication between interlocuters. Muhammad

¹³⁹ Sharing milk from the same nursing mother confers familial ties, rights, and obligations between individuals in ways akin to blood and confers explicit proscriptions from marriage. Stories of unrequited or impossible love between milk-siblings were not uncommon.

Mahmud, in particular, had an uncanny ability to interpret my silent reactions to his words through my body language. During conversations where Muhammad Mahmud was holding onto my leg, or we were holding hands, he had a keen sense of my uptake of his words, knew whether I was comprehending him, and gained a clearer understanding of what I was trying to communicate.

While engaged in mutual touch, I felt like my emotions were made legible like an open book. While I strived to acclimatize to the ubiquity of mutual touch, it was astonishing how interlocuters were able to discover what I was thinking in situations where I was intentionally withholding my interior feelings. One day during my fieldwork, after months of living in Dali Gimba, I had grown despondent after hearing about rumors and suspicion floating around about me in the village. One woman from the village came to my host family's mbār to warn them not to let their son travel to Nouakchott with me because without a doubt I was going to murder him there, because I was certainly a terrorist. I also learned about two other men who had been telling people that I am secretly a Jew or a spy.¹⁴⁰ Moreover, earlier in the day, I was castigated by another man in the village who questioned my motives in conducting research in such an impoverished place like Dali Gimba which "contained *no* knowledge," or my interest in learning parochial information Hassaniyya as a scholar when I should be using my connections in the United States to do more to improve the lives of villagers.

These experiences, coupled with homesickness, and impressions of sluggish progress in my fieldwork made me question the life choices that brought me to the village. Cheikhna met me at this time, and detected from my tone that something was off. I did not want to share my feelings with him, so I attempted to change the subject. Cheikhna came to hold my hands, and

¹⁴⁰ This was entirely unexpected for me, because I assumed that my brown skin and Muslim identity would have entirely shielded me from this kind of suspicion that is commonplace for other "America" researchers.

after a moment, he let go and said, "you want to leave—you have already left from here, Why?" I was then forced to explain what happened. Situations such as these made me aware of how feelings of anxiety, boredom, mistrust, confusion, frustration, and other intimate feelings are readily divulged through mutual touch.

Norms of Blind Communication

Without eye-contact, joint attention, and other visual techniques of maintaining phatic contact in blind communication, silences carry a distinct valence. In Sufi discourses, silence (*samt*) is typically considered a virtuous practice. In the *Risala al-Qushayriyya*" (The Treatise of al-Qushayri), a famous manual in the science of Sufism penned by Abu al-Qasim al-Qushayri (d. 1074), one chapter is dedicated to extolling the virtues of silence. Al-Qushayri writes that, "Those who are exerting themselves on the path of God choose silence, because they are aware of the dangers that are present in speech," and that furthermore, "Silence is not limited to the tongue; it should be applied to the heart and all of the limbs" (Al-Qushayri, 139-140).

In Dali Gimba, where many villagers are formally inducted into a Sufi path, silence often assumes a negative connotation and is not idealized. In the company of the blind, silence can easily be considered discourteous. Often, when I engaged in silent activities like writing in my fieldwork diary, reading, or observing, blind Ummārīs would prompt me to break my silence. With time, I learned to offer more verbal insights and auditory cues to my silent endeavors.

Besides mutual touch audible behavior and verbal communication serves as important phatic channels for maintaining connection between interlocutors. For example, rather than stepping softly, which may otherwise be a valuable practice in the performance of humility ($taw\bar{a}du$) and saḥwa, it is rather important to step noisily upon entering an mbār and to vocally announce your arrival, lest your presence startle people later when you are discovered. It is not

necessary to say one's name, but to simply speak, perhaps with a greeting, thus identifying oneself or communicating one's presence through voice. When this is not enough to recognize someone, blind villagers would prompt newcomers to introduce themselves explicitly.

Often, blind and sighted villagers tease blind individuals by deliberately withholding speech upon entry, creating a suspenseful ambiance and inviting the individual to guess the visitor's identity. Some might extend this playful silence, and the blind person might approach them to reach out or to identify them through touch, scent, or other senses. Sighted individuals too are also the subjects of playful behavior, especially during the nighttime.

Descriptive Speech Culture

In the space of Dali Gimba, these special linguistic conventions and communicative norms culminate in a distinctive speech culture characterized by its descriptive nature and explicit verbal contextual references. This form of communication prioritizes clarity of reference. By avoiding spatial deixis, discourse instead assumes universal and absolute perspectives. The meaning of speech relies less on the context of the spatial positioning of the speaker's body.

Sighted individuals in the company of blind interlocutors routinely collaborate in the intersensoriality of local experience by offering detailed visual descriptions and interpretations of ongoing activities and happenings. They frequently announce the names of people who enter a room, narrate over videos being played, and offer descriptions and interpretations of visual phenomena, appearances of things, happenings in the landscape, and the gestures and body language of others. A sighted villager offered me another example of blind speech (*kalām al-'umī*) by suggesting that when speaking with the blind, "you say things like '*mudd aydik*, ' meaning "give me your hand." Interactional contexts are verbalized, leading to more direct instructions and explicit verbal commands.

Such a distinct culture of speech hearkens to what cultural anthropologist Edward T. Hall once referred to as a "low-context culture," where the mass of information communication is "vested in the external code," as opposed to "high-context culture," in which, "most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit, transmitted part of the message" (Hall 1976, 79). Remarkably, Hall proffers "Arab culture" as an exemplar of high-context communication because its associated values of honor, shame, and communalism that encouraged the use of communication through implicit messages such as gestures, facial expressions, environmental cues and mood. However, in the blind speech community of Dali Gimba, a distinct "low-context" speech subculture forms where explicit messages and direct verbal communication are needed to effectively communicate.

Blind Hearts

Navigating the cityscapes of Nouakchott with blind Ummārīs presented distinct challenges compared to moving in the village environment. Once, I was visiting the city with Cheikhna. We walked hand-in-hand, through busy roads, climbing over uneven road structures, and helping one another avoid dangerous pitfalls. We kept getting lost and misguided by unclear gestural directions given by city dwellers, and we were unable to find our destination. At one point, someone on the street sharply criticized Cheikhna for blocking his vehicle's path, failing to recognize his blindness. We hurried away.

Reeling from the exchange, I asked Cheikhna, "Have you ever wished to be sighted?"

His response was immediate and resolute. "No—never," he exclaimed. When I prompted him to explain further, he offered a perspective on the value of being blind through normative Islamic reference, saying, "Because the eyes are a source of corruption (*fasād*)—and I fear the state of my heart if Allah had given me sight!" He followed up by quoting a hadith: "Indeed the

gaze (*nadhara*) is a poisoned arrow of Satan. Whoever abstains from it in fear of God shall receive from Him an increase in faith ($\bar{i}m\bar{a}nan$), the sweetness of which he will feel in his heart ($q\bar{a}lbahu$)."¹⁴¹

Islamic discourses of psychology and Sufism such as the popular teachings of al-Ghazāli and Ibn Khaldūn emphasize the profound connection between the eyes and the heart of the human. In these views, the heart is understood both physically and spiritually, not only as the seat of feeling and sentiment, but as a vessel through which humans perceive, comprehend, think, believe, and remember.

Cheikhna's hadith highlights the inherent vulnerability of the heart through the means of the eye.¹⁴² In the Qur'an, believers are commanded to "*yaghudūna min abṣārihim*" (24:30), which means to avert their sights, or lower their gazes. An illicit gaze—be it fueled by lust, jealousy, or malice—has the potential to pollute the human heart and negatively affect its functioning. This vulnerability can be characterized as the reflective counterpart of the "evil eye," which contemplates the harm of the gaze inflicted on the observed rather than the observer. To be sure, the eyes are also seen as avenues of positive and salubrious effects on the heart as well, such as in the gaze of love from a mother, a healing or spiritually elevating look of a Sufi saint, reading Qur'anic text, or in looking at the Ka'ba for example.

One harmful effect the gaze has on the heart is manifest in the faculty of memory. This point was affirmed by a sighted villager who quoted a poem by Imam al-Shāfi'ī (d.820), the founder of the Shāfi'ī school of Islamic jurisprudence, who tells a story about gaze and memory:

When he was a young student, Imam al-Shāfi 'ī was known for his profound memory. He was able to memorize anything he heard after only hearing it one time. However, on one occasion, he began to experience difficulties in his studies, in that he found that he had to

¹⁴¹ This hadith is found in Al-Ghazali's book on "Disciplining the Soul" (1995).

¹⁴² The heart is also vulnerable to harm through the faculty of hearing. The influence of the devil, for example, is characterized as "whisperings" (*waswasa*) in the ear.

repeat text three times in order to memorize it.¹⁴³ He sought advice from his teacher, Waki', who uttered the words included in the poem quoted,

I complained to my teacher Wakī' of the deficiency in my memory (sū'a hifdhi) so, he advised me to abandon sin. And he informed me that knowledge is a light (nūra) And the light of Allah is not given to a sinner. (al-Shafi, n.d.)

Reflecting on these words, the Imam remembered a fleeting moment when he failed to avert his gaze. Upon this realization, he repented to God, who cleaned his heart, and his memory was restored.

The story underscores the powerful effects of subtle acts of the gaze. Blind Ummārīs had different individual capacities of memory. They would employ it for different purposes, from memorizing the Qur'an to remembering poems and phone numbers. Many believed that their blindness protected their hearts and gave them enhanced capacities for being present, listening, acquiring, and embodying knowledge.¹⁴⁴ Not every blind Ummārī, however, excelled in memory. Some blind Ummārīs believed that blindness did not provide favorable conditions to facilitate learning or memory, and highlighted conditions that made it more difficult, but that blindness conferred a special charisma, strength, or work ethic that allowed them to act and overcome these barriers and excel.

Blind Education

The regions of North and West Africa are known for their distinct method of Qur'anic education, which has historically incorporated the use of the writing tablet (*lawh*, pl. *alwāh*). Although memorization and embodiment of Qur'anic knowledge, and practices of reading,

¹⁴³ In another version of the story, Imam al- Shāfi'ī's "difficulty in memory" came from a mistake he made in recalling two names in the lengthy chain of narration (*sanad*) of a particular hadith. In this case, the difficulties of memory are related to failing recall rather than inefficient encoding.

¹⁴⁴ In his ethnographic work on the ethics of listening to religious cassette tapes in Egypt, Charles Hirschkind finds that for Cairenes, the act of proper intentional listening (insat), which has the capacity to transform the heart and instill piety in the listener, is distinguished from the passive action of hearing (*sam*). Proper listening requires certain affective pre-requisites such as tranquility of the heart (*sakīna*) and is accompanied by actions such as contemplation (*tadabbur*) (Hirschkind 2003, 70).

listening, and audition of the Qur'an are important features in many traditions of Qur'anic education around the world, in these African contexts, Qur'anic education has retained writing as a central practice involved in the study of the Qur'an. In his work on the history of Qur'an schooling in the Senegambia region, Butch Ware suggests that the use of the writing tablet preserved in West Africa could have origins in the lifetime of prophet Muhammad himself (570-632) (Ware 2013, 2). Anthropologist of Mauritania Corinne Fortier writes that in the Hassaniyya language,

[T]he expression that signifies that a child is following such an education is 'He is studying his writing board' (*yagra lawhū*), which is linked not to any specific place but rather to the central tool of instruction, the writing board (*lawh*). It is striking that, wherever the pupil receives instruction—in a tent (*khayma*), in desert pastures (*bādiyya*), or in a luxurious villa in Nouakchott, the capital—the writing board remains the key symbol of Qur'anic instruction. (Fortier 2016, 61)

Contrary to this prevalent pedagogical method in the Saharan West, blind Ummārīs draw upon an alternative tradition of Qur'anic education. Instead of the *tariqat al-lawh* (the method of the tablet), they instead are inducted in a system called, *tariqat al-talqīn*, or *tariqat al-shafawī*, meaning, the "method of oral of instruction." In this mode of knowledge transmission, Qur'anic knowledge is never mediated through writing or reading text. Students receive their portion (*kitba*) by listening intently to the audition of their teachers a number of times. They then return to their individual locations, and repeatedly enunciate the segment until it is sufficiently memorized, or figuratively "cooked" (*tāyba*).

Ummārīs celebrate their educational approach to the Qur'an because they see it as a lost prophetic tradition of Qur'anic knowledge transmission. As one blind Ummārī Qur'an teacher told me, "the blind are blessed (*karrama*) with the life of the companions (*ḥayāt as-ṣaḥāba*) of the Prophet Muhammad." He explained that practices of reading written codices of the Qur'an and the use of the lawh were techniques that became institutionalized a few generations after the Prophet. Instead, the "righteous predecessors" (*al-ṣalaf al-ṣaliḥ*), which included the first generation of the Prophet's contemporaries known as the "companions," as well as the subsequent generations known as the "followers" and the "followers of the followers" (*tābi ʿūn* and the *tābi ʿū al-tāb ʿīn*) all predominantly learned the Qur'an and the *hādīth* using the method of oral instruction. He remarked that even the Prophet himself learned the Qur'an through direct instruction from the archangel Jibra'il.¹⁴⁵ The Qur'an teacher further claimed that "the sighted of the global Muslim community (*umma*) have entirely abandoned this exemplary practice (*sunnah*) of the Prophet, and today it is a tradition only kept alive by the blind." Through this identification, blind Ummārīs forged a connection of authenticity that linked them to the venerable origins of Islamic tradition.

Blind Ummārīs further saw themselves as having a unique affinity to the Prophet by sharing in his miraculous quality of being "*ummī*." There is considerable difference of opinion in Islamic discourses about the meaning of this term. Most often, it is taken to mean being "illiterate," often translated euphemistically as "unlettered" in the sense of being unable to read or decipher written text.¹⁴⁶ According to Ibn Khaldun, although being ummī is ordinarily considered a deficiency in the human, the Prophet Muhammad was an exception to this because for him it was a sign of his perfection (*kamāl*) (2015, 465). For Muhammad, the quality of being ummī becomes an important manifest sign that establishes the authenticity and the miraculousness (*`i jāz*) of the Qur'an and himself as a Prophet because it is taken to show that

¹⁴⁵ The Qur'an teacher clarified that the technique of direct instruction that took place between the angel Jibra'il and the prophet Muhammad was not aural. Instead, the knowledge of the Qur'an was transmitted and deposited directly in his heart without mediation from external senses.

¹⁴⁶ Sufi approaches generally interpret ummī in a different way. They claim that it is unreasonable to suggest that the Prophet Muhammad—who represents the perfection of mankind (*insān al-kāmil*)—to be unable to read and write signs. Instead, they claim *ummī* means that the Prophet *did not* read (or was unread), although he may have known how to. Alternatively, ummī is also interpreted as meaning "motherly" (Fode Drame, Personal Communications, 2023).

the Qur'an was not spun on his own artifice or based on his exposure to previous Judeo-Christian sacred texts or poetry, thus proving that source of the Qur'an was divine.

For most Muslims globally, being "unlettered" is viewed as an exceptional characteristic of the Prophet Muhammad that is not meant to be emulated. On the contrary, it is typically seen in a negative light. Traditional and modern systems of Islamic education place significant emphasis on literacy, textuality, and writing in their pedagogies.

Muhammad Mahmud said that ummī meant that the Prophet, "could not or did not *write* $(la \ yaktub)$ —meaning— he did not study writing tablets $(yagra \ al-lawh)$ or memorize or write (yaktib) books." Blind Ummārīs celebrated being ummī, like the Prophet, and identified with the term positively as a source of pride, honor, authenticity, and exclusive connectedness to the Prophet. To them, being blind $(a \ main main main main main meant that served as a sign of his prophethood.$

For the Ummār, literacy serves as a critical benchmark that distinguishes the blind from the sighted. A clear example of this comes in the case of Alboo, who was the only Ummārī that had ever undergone ophthalmic surgery. There was considerable controversy in the village over the circumstances of the surgery and conflicting opinions over its long-term outcomes. Alboo was six years old in 2015 when he was taken to Nouakchott for a cataract surgery. His parents were doubtful, hesitant, and even resistant to the surgery, but they felt obliged to consent due to the fact that the President of Mauritania, Mohamed ould Abdul Aziz, had personally sent a delegation to the village, with the regional governor, to invite the family to Nouakchott for the surgical operation that had been pre-arranged. Alboo's parents only consented to surgery on one eye. The operation served as a test case that ultimately failed. The boy returned to Dali Gimba,

and seemingly little changed. Most villagers believed that Alboo was still blind, while others, especially some of the sighted, noted some improvements in his residual vision, and commented about his reduced nystagmus and white eyes in the operated eye. Alboo himself recognized having clearer residual vision in his operated eye, yet he denied being sighted (*mubşir*) and continued to live a "life of the blind" (*ḥayāt al-`umī*).

Medical professionals opined that the chances of a "successful" outcome had been slim, given Alboo's advanced age. They contended that the ideal age for the surgery was less than two years old. Villagers mostly remained skeptical. When I asked his mother about her son's experience, she said, "Alboo is blind! Have you seen the scars on his legs? Do you see him study the writing tablet (*yagra al-lawh*)? Can he write (*yaktib*)? No. He is blind." This statement underscores the deep-rooted relationship between literacy and sightedness. Such a connection is also evident in standardized vision tests such as the Snellen eye chart, which assesses visual acuity by gauging one's ability to discern a set of characters or figures at a certain distance and under certain lighting conditions (Germano 2017).

Conclusion

This chapter has explored how blindness constitutes alternative ways of attuning to the world through distinct multisensorial activities of perception, navigation, communication, and education. I show how these activities are influenced but not determined by the physical conditions of blindness. The exceptionality of Dali Gimba, marked by its high prevalence of congenital blindness linked to genealogical and genetic causes, offers a compelling lens through which to analyze the concept of blind alterity. The sensorial activities are not always exclusive to the blind and are styles of acting and communicating that are sometimes accessible to the sighted. They are complimentary to local cultural norms and the context of the bādiya, as

indicated in the emphasis on the aural or the preponderance of mutual touching. Blind ways of being and interacting generated a specific cultural zone in Dali Gimba with a community that diverges from the broader norms of society, such as in the with a standard of low-context blind communication.

Although Malti-Douglas made the important observation that blind characters make "unusual" use of the non-visual senses, there is no reason to exclude the visual from this logic of blind alterity. This oversight is likely the consequence of her definition of blindness "as a physical defect, the *absence* of sight" (Malti-Douglas 1988, 19), which is a common stereotype that considers blindness essentially as an experience of non-seeing or a mode of being somehow excluded from the realm of visuality. However, as demonstrated by the findings in this chapter, Ummārī blindness is a thoroughly visual experience. Blind alterity cannot be defined as the absence of sight or seeing because blindness is inundated with seeing. Blindness does not just lead to the unusual use of the non-visual senses, but to an unusual use of the visual senses as well.

Many studies in the anthropology of the senses have been motivated by an antiocularcentric drive to study the "non-visual" senses (Fabian 1983; Howes 1991). Likewise, many studies of blindness and visual impairment have focused on the differential use of the non-visual senses (Malti-Douglass 1988; Deshen 1992; Golledge 1997; Kitchin, Blades & Golledge 1997; Paterson 2006; 2007). In contrast to these approaches, this chapter considers how blindness constitutes a distinct way of seeing the world, and lends access to differential sensory worlds. This approach dismantles notions that equate blindness with absence, deficiency, or lack by spotlighting its role as an integral aspect of Ummārī social and cultural identity. Here, blindness

emerges not as a hinderance, but as a unique culture and community with a cherished perspective and approach to experiencing, acting, and engaging with the world.

In numerous cultures around the world, blindness is not just understood as a physical state. It acts as an important symbol used to muse upon sight, knowledge, and the nature of social difference itself. The Qur'an too recognizes the symbolic significance of blindness and identifies it as a crucial domain of contrast worthy of contemplation. In the words of Lakoff and Johnson, blindness is a "metaphor that we live by," because it does not just function solely as a linguistic expression but serves as a fundamental building block for our cognition and worldviews (1980). Despite the symbolic importance of blindness, ableist cultures around the world often characterize blindness in ways that substantially diverge from blindness as lived experience. This chapter seeks to bridge that divide. Blind alterity is a powerful symbolic construct, and much can be learned by contemplating it, provided that we examine what this alterity actually is rather than just what it is assumed to be.

Chapter Six: Regarding Water Divination

In Chapter Three, I explored the varied manifestations of the Ummāri karāma in different kinds of miraculous abilities, or what I describe as "extraordinary sensory attunements." This chapter delves into the most renowned of these abilities: the ability to *divine* water under the earth and perform *tanqīb* (prospecting) to locate ideal sites for wells. This ability was only possessed by the patriarch of the clan, Muhammad Mahmud.¹⁴⁷ Water divination was also one of the first things that Dali Gimbans wanted to inform me about. I had first heard about Muhammad Mahmud's ability to divine water when I arrived in Dali Gimba in 2017, during our initial conversation when Muhammad Mahmud first narrated the Covenant of Idde. At that time, another (sighted) villager who was present told me:

But you know, Muhammad Mahmud, this one, he can discover (*yaktashif*)!—*ya* '*ni* — he can see water deposited beneath the earth. If water exists here [pointing to the ground] or there [pointing away], as soon as he *sees* the earth like this [swiping his foot across the earth], he stops and says, "water is here." Moreover, he can even tell how far away the water is at that location, in exact meters, and tell if the water found there will be sweet or salty. People come to this place here, from every part of the country, to seek out this blind man to help them build wells. So many wells he has helped build! We in Kumbi Saleh, have one well that the whole village uses, and it was none but Muhammad Mahmud—this one—who discovered it.

Much of the Ummār's regional notoriety stemmed from Muhammad Mahmud's prolific career as a water diviner, having found over 1,000 wells across the Saharan West over his eighty years of life.¹⁴⁸ I was immediately fascinated by Muhammad Mahmud's water finding activities and

¹⁴⁷ This chapter expands upon themes originally introduced in an article (Usman 2023).

¹⁴⁸ Muhammad Mahmud did not keep a log of his water divination practices, and often felt shy to track the number of wells he found. This number is a conservative estimate based on numbers given by family members and estimations based off frequency of calls, accounts from clients, and the mapping of wells in the badiya space.

eager to accompany and observe him as he performed the practice. The venerable shaykh voiced his support, and extended an open invitation to accompany him on his consultations as many times as I needed while I stayed in the village during my fieldwork.

This opportunity came sooner than expected. The following day, at dawn, the shaykh's son Cheikhna woke me up to tell me that his father had received a call in the night for a water divination consult. He was set to leave promptly, and I was welcome to join. Cheikhna also informed me that calls for water divination services had been frequent—there were several calls that he took in the past few weeks. He suggested that if I wanted, I could rest and catch the next one. My body was numb with fatigue from the two-day journey across the country that we had taken to reach the village the previous day. I also felt obliged to remain with my wife Salmah, who had accompanied me on this trip, to unpack our belongings and get us situated in our new living space. I decided to stay and planned to accompany Muhammad Mahmud at the next opportunity. Little did I anticipate that the opportunity to accompany Muhammad Mahmud would elude me for another five years.

It was uncanny how circumstances consistently aligned to prevent me from joining a water divination call. Consultation requests were unpredictable, swinging between numerous calls in a single month, or several months without any calls at all. Muhammad Mahmud would respond to calls quickly, usually heading out the next morning. Sometimes a group would arrive in Dali Gimba with a car and take Muhammad Mahmud with them for the consult within hours of arrival. I missed numerous opportunities to go with Muhammad Mahmud just as I left the village. While requests most frequently came from clients within the far eastern Hodh ech Chargui region, suitable for day trips, many also came from further distances, into southern and

central Mali, across Mauritania, and northward into the Western Sahara. These further calls could take days or even weeks to complete.

As months and years passed, the feelings of uncanniness gradually fell prey to suspicion. Back in the United States, when I would tell people about Dali Gimba and Muhammad Mahmud, they would consistently ask whether I had seen the practice of water divination with my own eyes. My research advisers too urged me to investigate the dynamics that may be preventing me from observing the practice of water divination. Was there something in my structural position as an ethnographer, outsider, or "adoptive" son¹⁴⁹—that prevented my access to this domain of activity? Were they intentionally keeping this practice hidden from me? While a compassionate voice wondered whether the practice was a secret that I could not be privy to, a more skeptical voice questioned if the practice and other claims of the Ummar were actually scams.

When I asked Muhammad Mahmud, he reassured me that it was a mere coincidence, a consequence of few requests during the months that I spent in Dali Gimba and other contingencies. He reiterated his invitation for me to accompany him and told me that he too desired that I witness the practice, so that I may document it and share it with the world through my writing.

By mid-2019, as my fieldwork in Dali Gimba was drawing to a close, I had spent thirteen months in close proximity to Muhammad Mahmud without witnessing the water divination practice. This raised a critical question in my mind: What significance would there be in "seeing" the water divination practice firsthand? Why was it important to subject the karāma of water divination practice to the scrutiny of direct participant observation and my own senses? What difference would it make, I wondered, to my understanding and interpretation of this practice?

¹⁴⁹Muhammad Mahmud rarely brought along his sons on water divination calls. He usually brought other young men from the village or more distant relatives of the family.

Over months living in close proximity with Muhammad Mahmud, in Dali Gimba and accompanying him on numerous other trips, I gained significant insights into the practice of water divination. I learned that Muhammad Mahmud was not just an exceptional man who offered divination to private individuals. His life-long dedication to water divination and projects of well founding had positioned him as a pivotal figure in the development of well infrastructures the Hodh region and broader transformations in the public sphere.

Muhammad Mahmud's life story, interwoven with this service, offers a unique lens into the contemporary history in the Saharan West, particularly in the transition from nomadism to sedentary life in newly formed villages. Muhammad Mahmud's work made him an invaluable historical source on the social role of water divination in the evolving landscape of the Saharan bādiya. In this way, Muhammad Mahmud served both as a significant historical actor and chronicler of the region's history.

Although direct observation of the water divination practice eluded me, its impact and material traces were unmistakable. The wells themselves were the most tangible evidence of water divination. In towns and villages across the country, I met folks who credited Muhammad Mahmud with locating the sites of their active wells. Through conversations with the old man and with those who had witnessed or contracted his work, I pieced together the procedural aspects of the divination practice. Although direct observation was missing, I had access to photographs and video footage of the practice, and Muhammad Mahmud himself even demonstrated his technique in simulation, offering me a glimpse into the physicality of the process.

In August 2019, I had to leave Mauritania. Salmah had reached the last trimester of her second pregnancy in the United States, and my fieldwork funding had run out. When I came

back, I sought to organize one last trip to Dali Gimba, especially with the desire to potentially catch a water divination call, but with the onset of the COVID-19 pandemic, travel to Mauritania was strictly restricted, and any hope for a return was dashed. I consigned myself to writing my dissertation with what felt like an obvious hole in my research work. Without having "observed" the water divination process, the practice remained enshrouded in uncertainty, doubt, secrecy and suspicion.

Then, in September 2021, travel restrictions for Mauritania were lifted, and an opportunity to return to Dali Gimba arose. This time, I visited Dali Gimba with Salmah and our nearly two-year-old daughter Sakina. During this brief two-week visit, a call for water divination serendipitously came, and I finally had the opportunity to accompany Muhammad Mahmud and witness him performing a water divination consultation. Two days after the event, our trip was cut even shorter, because Sakina fell gravely ill and needed emergency medical treatment in Nouakchott. Muhammad Mahmud bid us a warm and eerie farewell, and we were on our way back to the United States. Four months later—on January 16, 2022—I received a call from Dali Gimba. Muhammad Mahmud had died.

Given this background, I have reserved the subject of water divination to this final chapter. I start by looking at the Saharan West as a society of wells and providing an overview of the practice of water divination in various histories and discourses. Following this, I use Muhammad Mahmud's life as a historical lens to illustrate the evolving role of water divination in the contemporary history of the Saharan bādiya. I explore how his collaboration with a Sufi shaykh in well finding and in establishing projects contributed to a transformation of the landscape from a place of death and dryness to a place of life and water and stimulated the transition from nomadic life to settlement in villages. Next, I delve into Muhammad Mahmud's

Qur'anic conception of the hydrological cycle and how the practice of water divination is understood to draw upon knowledge from the world of the Unseen (alam al-ghayb) and highlight the ethical framework that governs his practice of water divination.

Finally, I offer a window into the practice of water divination in action based on my observation of the practice. I analyze its function as a sensory and tactile engagement with the material world, its role in prophesying future possibilities, and its qualities as a miracle that is interpreted by its pragmatic efficacy. Through this account, I show how water divination transcends the possibilities of seeing and direct observation, and reveals its truths in the social life that it engenders.

A Society of Wells

Critical geographer Yi-Fu Tuan posits that Western geographic approaches often misunderstand desert environments because they contravene the presumed logic of the "hydrological cycle," which is a cultural model that conceptualizes water in the natural world as a continuous circulation, from oceans to vapor in clouds, to precipitation over land, and finally by returning to the ocean through rivers (Tuan 1980). However, desert regions of the Sahara such as the Hodh are marked by considerable distance from oceans, sporadic precipitation, and a notable lack of rivers, lakes, and other permanent bodies of surface water. This contrasts with the common belief in human geography that society emerges in proximity to surface bodies of freshwater. In the Saharan context, societal flourishing instead hinges on the proximity to wells and by drawing upon vast subterranean water reserves.¹⁵⁰

¹⁵⁰ Hydrogeologists have found that the largest sources of liquid freshwater in the world are deposited, "in the great sedimentary basins of the Sahara," where a "75-meter corridor of water" extends beneath the surface of the vast desert region (Macdonald et al. 2012).

Wells are primary sites through which the social space of the Saharan West is charted. For example, if you open a copy of *Kitāb al-wasīṭ fī tarājim udabā' shinqīṭ* ("The Reference Book of Chinguetti Literati") by Ahmad wuld al-Amīn al-Shinqītī (1919), which is considered one of the most influential sources on Mauritanian literary history and a vital source of local spatial imaginaries you will find descriptions of geographic spaces and delineations of tribal regions by reference to a field of toponyms derived from the names of prominent wells (*abyār*), which are often named after their founders.

Prevailing approaches to Saharan regional space that emphasize the dynamic, transitory, and migratory qualities of nomadic life, the Saharan desert environment, or trans-Saharan migration, often conjure an imagination of a Saharan regional space that is "practically devoid of fixed landmarks" (Vium 2009). While the vernacular architecture of nomads is indeed transient and mobile, wells stand as durable built structures that anchor regional geographic space, directing the movements of humans and animals within it.¹⁵¹ Wells are not just sources of water, but also foundational elements of locality. The territorial demarcation of colonial, international, and provincial borders in the "interior" Saharan hinterlands have often been delineated through linear pathways connecting specific wells (Zartmann 1968).

In her analysis of the travelogue (*riḥla*) of Shaykh Mā' al-Aynayn wuld Muḥammad Fāḍil (d.1910), a prominent anti-colonial and Sufi leader, July Blalack notes the centrality of wells in Saharan navigation and social geography:

When he narrates his movements through the Sahara he uses tribes and wells as his placemarks explaining, for example, that he started his journey by the Nawal well. He stays with the Aghlāl tribe at the Aniyūshkani well before heading west to the Anūwāsār well to look for a caravan to either "Shinjīt" or Taganat. (ibn Muḥammad Fāḍil and Murrabīh Rabbuh 2010: 34-35; quoted in Blalack 2023, 30)

¹⁵¹ Saharan space has other fixed landmarks, built architectures of sedentary and agrarian peoples, and cities and towns that have always been features of the Saharan geography.



Figure XXIII: A Flock of Camels at a Well in Hodh el Gharbi Photo by Salmah Rizvi

History of Water Divination

In societies dependent on aquifers and wells, mastering reliable techniques to know the subterranean environment is crucial. To this end, the practice of water divination has been a key method of accessing such knowledge.

Water divination is called by many names. In the Saharan West, Muhammad Mahmud's work was called *tanqīb 'an al-ma'* ("prospecting for water") in standard Arabic, or in Hassaniyya, *illawad l-mā'* or *inā 'at al-mā'*,¹⁵² meaning to "search for water." His ability was often described as "seeing" water under the earth. I prefer the translation water "divination,"

¹⁵² The terms "tanqīb" and "dowsing" refer to the prospecting of any kind of underground resource. In this work, I follow local conventions and use the term synecdochally to refer specifically to the prospecting of water.

because this term retains the role of divine mediation of knowledge in the practice, and because it situates the practice in the vast genealogy of African divination.¹⁵³

Contrary to two Western scholars' assertions that water divination was "wholly invented in 16th century Europe" (Deming 2002: 452), or "has a largely European genealogy" (Krautwurst 1998: 71), its roots extend much further and evidence of water divination found in many different parts of the world. Some suggest that the earliest evidence of water divination is found in a depiction of the practice in cave paintings from Tassili n'Ajjer in the central Sahara, dating to 6000 B.C (Wolcock 1994). The Jewish Torah, the Bible, and the Qur'an tell the story of God commanding Moses to strike the earth with his staff, whereupon water gushed forth (Numbers 20; Exodus 17:5; Qur'an 2:60). Although various traditions of water divination employ different methods and conceptual frameworks, they all generally involve the sensory perception of underground bodies of water, either through supernatural or natural means, utilizing skills that are either innate, acquired, or divinely inspired.

The construction of every well begins with the crucial decision of where to dig. Whether undertaken by hand or by machine, digging is a labor-intensive endeavor. Knowing where and how deep to dig is a vital expertise in developing well infrastructures. Surprisingly, despite the centrality of wells in Arab, North African, and Saharan societies, there has been little attention given to water divination practices in literary discourses, or historical and ethnographic works on the region.

Ali Hassan, in his article on Arabic literary sources pertaining to the detection of underground water, makes note of the scarcity of such references, stating that, "only a few

¹⁵³ In English, it is perhaps most often called "water dowsing," in reference to the dowsing rod, which is the primary tool used in most European styles of the practice since antiquity (Dym 2010). In Latin, this rod was also called *virgula divina* (Ibid., 53). Another synonym of this is "rhabdomancy," drawing from the Greek rhabdos, meaning "rod" (Vance 1891). In the United States, the practice is popularly known as "water witching" (Vogt and Golde 1958). In French it is called *radiesthésie* (Durand 2007). This diverse terminology reflects the practice's storied past in the European and Western world.

treatises [in Arabic literature] touch on the subject of wells" and the techniques used to find groundwater (2020, 15).¹⁵⁴

Similarly, in his famous "*Muqaddimah*," Ibn Khaldun (d.1406) presents an exposition on the various forms of supernatural perception, including soothsaying (*kāhāna*), dream visions (*ru 'ya ṣādiqa*), augury, astrology, geomancy, treasure hunting, and mystical gnosis, yet he makes no mention of water divination (Ibn Khaldun 2015). The practice is also notably absent in hagiographies of Sufi saints and in compendiums of their miracles, such as Farīd ud-Dīn 'Aṭṭār's (d.1221) *Tadhkirāt al-Awliyā* (2000).¹⁵⁵

Challenging Water Divination

Practices of water divination have also long been subversive practices, not only because they challenge the hegemony of rationalist scientific discourses, which dismisses or fears these practices as pseudoscience or magical thinking, but also because they often challenge the authority of the religious traditions they may draw upon.

In Europe, as early as 1518, the protestant reformer Martin Luther explicitly indicted dowsing as a violation of the first commandment, categorizing it as a form of sorcery and idol worship (Luther 1521, cited in Dym 2010, 62). In 1917, the U.S. Geological Survey concluded that,

It is difficult to see how for practical purposes the entire matter could be more thoroughly discredited, and it should be obvious to everyone that further tests by the United States Geological Survey of this so-called 'witching' for water, oil, or other minerals would be a misuse of public funds." (Ellis, 5)

¹⁵⁴ In his article, Hasan analyzes one book, *Inbat al-miyāh al-khafiyya* ("The Extraction of Hidden Waters") by the mathematician Fakh al-Dīn Abū Bakr Muhammad b. Al-Hasan al-Kharajī (d.1029). However, this work discusses mathematical and geological methods in locating groundwaters, drilling wells, building underground aqueducts (*qanāt*), but does not address water divination.

¹⁵⁵ In the Qur'an the practice of water divination is associated with the *Hud Hud* (Hoopoe) bird, who served as the Prophet Sulaymān's water diviner (Drame 2019).

Research on the validity of water dowsing has continued to be conducted, as the practice continues to thrive until the present day.

In the past few decades, water divination has seen a resurgence, particularly under the pressure of increasing global drought conditions and crumbling water infrastructures. A 2017 investigative report revealed that ten of the twelve largest water companies that are responsible for the majority of water supply in the U.K. report the use of dowsing rods to help find leaks and bursting pipes (Le Page 2017). Similarly, regions such as Northern California, New England, and Burgundy in the French countryside have witnessed a growing demand for water dowsing services. This revival has prompted criticism by some who view it as a regression to magical thinking, a waste of public resources, or as a problematic consequence of rising misinformation, anti-intellectualism, and conspiracy mongering in the present day. Compared to other occult practices such as witchcraft, or divination by crystal balls, tarot cards, or Ouija boards, water dowsing maintains a distinctive presence and recognition in the modern Western world.

In Mauritania, water divination is readily recognized, solicited, and believed by many. Most who hear of Muhammad Mahmud's karāma respond with marvel rather than skepticism. However, his practice also attracted dissidents, especially among rationalist and positivist minded citizens, as well as those holding modernist religious views that reject the possibility of miracle, at least in the modern day. These two lines of criticism congeal in the scientific agenda and activism of Mouna Hadrami, the lead researcher of the genomic study of the Ummar. Hadrami told me that her motivation for conducting the genomic research project on the Ummar arose from an explicit intention to debunk the karāma as being inconsistent with biological reality, as well as something that she found to be theologically problematic.

Early Life of Muhammad Mahmud

Muhammad Mahmud's work of water divination has played a pivotal social role in the contemporary history of the Hodh-ech-Chargui region. His life story is a testament to the evolving social significance of water divination, particularly in its interplay with the revival of Sufism, the founding of networks of wells, and the transition from nomadic to sedentary lifestyles through the reconfiguration of social, territorial, and ecological relationships in the Hodh.

Born in 1942, Muhammad Mahmud was the sixth child of his father Sidī Muḥammad (d.1958). His birthplace, Komotunga, is located in a region that now lies within the borders of Mali's Koulikoro region, south of the border with Mauritania. Belonging to the Awlad al-Fāqi tribe, Muhammad Mahmud's early life was rooted in the nomadic pastoralism typical of the bidhān people in the Saharan West until the late 1970s. In the Hodh region, pastoralist activities historically centered around cattle rearing. Muhammad Mahmud was uncertain of his exact birth date but surmised it was during the summer months, between May and July. This inference was based on the seasonal migration patterns of Hodhi nomads, who would move southward with their caravans of tents and animals in search of lush pastures and wells, away from the aridity and heat of what they considered their northern homelands.

Muhammad Mahmud spent his youth studying the Qur'an and other subjects under his father's tutelage. However, his father passed away in 1958 when Muhammad Mahmud was just sixteen years old. He confided to me that he had always possessed the gift (*mawhiba*) to see (*shūf*) beneath the earth since his early childhood. Yet, he only began actively using this ability later in life.¹⁵⁶

¹⁵⁶ Ummārī blindness and its associated qualities are referred to as a karāma, but when referring to one's own extraordinary sensory capacities, people use the word "*mawhiba*," meaning gift or endowment.

Tajrīd with the Sufi Shaykh

Following his father's death in 1958, Muhammad Mahmud departed from his family's caravan to deepen his pursuit of sacred knowledge (*talab al-'ilm*). It was during this period that he encountered and pledged allegiance (*bay'a*) to "Cheikhna" Muhammad Mukhtar (d.1992), a then rising Sufi master of the Qādiriyya—Fāḍiliyya Sufi order (*tarīqa*) who migrated east to the Hodh from the Taganat.¹⁵⁷ For the next fifteen years, Muhammad Mahmud joined a small cadre of acolytes who lived and travelled in the caravan of the shaykh's family. This intensive form of instruction known as *tajrīd*, or "isolation" entails a rigorous discipline of turning away from the material world (*dunya*) to immerse oneself in spiritual presence (*haḍar*) of a Sufi master.

Muhammad Mahmud told me that his father had been an advanced scholar and $faq\bar{i}h$ of the Mālikī school, but he had not taken the path of Sufism (*tasawwuf*). Muhammad Mahmud's decision—like others of his generation—to join the Sufi network was the first seeds of a Sufi revival that spread through the Hodh. Over subsequent decades, a growing number of men and women from various villages across the province took *bay* '*a* with Muhammad Mukhtar, and later with his son Sa'ad Buh after Mukhtar's death in 1992. Sufism not only informed the moral and epistemological grounding of the water divination practice, but moreover, produced a social movement through which the practice was deployed throughout the region.

In the following two sections, I highlight two fundamental aspects of this Sufi order: the disciplinary practice of *khidma*, or "service," and the cultivation of *zuhd*, or the "renunciation of

¹⁵⁷ Muhammad Mukhtar wuld Muhammad Mahmud wuld Bakkar (d.1992) was a Kunta tribesman from Taganat. He acquired his spiritual authority (*khilāfa*) through a spiritual lineage (*silsila*) drawing from his teacher, Sa'ad Būh al-Saghīr (d.1991), who acquired it from his brother of Shaykh al-Turad (d.1945), who acquired it from his paternal uncle, Sa'ad Būh al-Kabīr (d.1917), who acquired it from the son of Muḥammad Fāḍil al-Māmīn al-Qalqamī (d.1868), who was the progenitor of a number of socially and politically-significant branches of the Qadiriyya in the Saharan West. For accounts of the Qadiriyya and the Fadiliyya in Saharan West, see Robinson (2000), Boubrik (1999), McLaughlin (1997), and Stewart (1970).

the world." These values not only shaped the inner development of Sufi acolytes, but also projected a model of social life that was deployed on a broader social scale.

Reciprocity of Khidma

While engaged in tajrīd, Muhammad Mahmud and other acolytes dedicated themselves to *khidma*, performing various acts of service for the shaykh and his family. As is typical to this form of learning, these included pastoral labor ($m\bar{a}shiy\bar{a}$), attending to guests, meal preparation, water-fetching duties, and other tasks involved with managing the rhythms of nomadic life.

These acts of service were not only meant to benefit the shaykh; they were understood as effective disciplinary practices that fostered virtuous conduct (*adab*), discipline of the soul (*tazkīyat al-nafs*), spiritual nurturing (*tarbiyya*), and stimulated the journey (*sulūk*) towards enlightenment. The shaykh also guided acolytes through practices of invocation (*dhikr*) and recitation of litanies (*awrād*), especially of the names of God and the *shahāda* (*lā ilāha illa Allah*), alongside other supererogatory acts of worship.

The practice of khidma was reciprocal. Just as acolytes offered khidma to the shaykh, he was, in turn, committed to serving his disciples. This dynamic is articulated in the common Arabic proverb, "The master of a people is its caretaker" (*sayyid al-qawmi khādimuhum*). The Shaykh's esteemed status of closeness with Allah (*wilāya*) and saintly authority (*walāya*) over the people was exemplified through his acts of *karam* (generosity) and *ikrām* (hospitality) to his acolytes and the broader community.

Idealizing Zuhd

The Qadiriyya-Fadilyya way espoused by Muhammad Mukhtar embraced a form of Sufism characterized by sobriety and austerity. It drew on the ideas of al-Ghazali (d.1111) to emphasize the value of rigor and steadfastness (*istiqāma*) and followed in teachings of Junayd of Baghdad (d.910) to generally eschew expressive or poetic representations of mystical experiences. The Sufi order advocated for strict adherence to Islamic law (*sharī*^{\cdot}*a*) and scrupulousness (*wara*^{\cdot}) in personal matters.

Ahmad Hafiz (d.2021), a Kunta tribesman and one of Muhammad Mukhtar's early acolytes, defined the specific tenor of the Sufi order:

All Sufi paths are paths to Allah, but each one emphasizes a different attribute of Allah, and a different virtue through which to reach Him. As for the Qadiriyya, the central attribute of Allah is *tawhīd* (oneness), and the defining virtue of the path is *zuhd fi al-dunya* (renunciation of the world).

Zuhd remains an ideal virtuous form in Mauritania.¹⁵⁸ Throughout Islamic history, zuhd has been interpreted in many different ways. Among Sufi acolytes of Muhammad Mukhtar, the virtue did not entail performing heroic acts of asceticism, such as mortification of the body, intentional privation, celibacy,¹⁵⁹ begging, or physical withdrawal from society as sometimes idealized by other Sufi traditions. Ahmad Hafiz explained that their ideal is instead focused on cultivating an internal and subjective attitude of renunciation—an indifference to material wealth and status, rather than outright rejection of them. It involved freeing oneself from personal desires (*hawa*) and reducing long-term hopes (*qişar al-amal*), replacing them with patience (*şabr*), contentment (*radaa*), and *tawakkul* (reliance) on Allah alone. This approach to zuhd influenced attitudes towards nomadism and water in the environment, as discussed in the next section.

This "indifference" approach of zuhd is captured by a saying attributed to the early Sufi figure Sufyān al-Thawrī (d.778), "Abstention from this world [rests on] the curtailing of one's

¹⁵⁸ Although zuhd was especially prioritized in early Sufi discourses, this ideal has gradually been replaced by a countervailing approach that instead prioritizes *shukr* (gratitude). Ali Hussain notes that such a transition is articulated by figures such as Imam Abu Hasan al-Shadhili (d.1258) and Abd al-'Azīz b. Mas'ūd al-Dabbāgh (d.1719) who champion gratitude as a superior virtue in relation to zuhd, especially in its external form (Hussain 2023, 181).

¹⁵⁹ Celibacy is one way that women, especially blind women, exercise zuhd.

hope [for the future]; [it does] not [rest on] eating rough food and wearing a [coarse woolen] cloak" (Ibn Abī l-Dunyā, 42 §32; cited in Sviri 2023, 172).

Badiya dwellers across the Saharan West and even denizens of cities with no Sufi affiliation commonly identify *zuhd* and a generalized attitude of indifference to the affairs of the world as a collective attitude to the condition of life in the Saharan West. One young Nouakchott man blamed the *zuhdi* approach to life for Mauritanians political quietism, stoicism, and lack of interest in economic development. He said, "That is why nobody cares about corruption and being robbed! Mauritanians—all of them—they have left off the dunya (*tarakū al-dunyā*)! We are all *zāhidīn*!"

Wells in Nomadic Spaces

During Muhammad Mahmud's years as an acolyte, his shaykh forbade him from using his water divination gift. He was to instead focus on activities of disciplining the soul befitting to a Sufi disciple. Additionally, as one of his sons explained, "it would be unbecoming for a young man to go around performing miracles before he had turned forty years old." It was only in the mid-1970s that the shaykh granted Muhammad Mahmud the *idhn* (authorization) to conclude his tajrīd and begin using his divinatory abilities. However, to fully grasp this turning point, it is essential to first understand the changing social backdrop of nomadic life in the bādiya during that era.

Until the 1970s, Hodhi nomads adhered to a seasonal transhumance migratory pattern. During the kharīf (rainy) season from July to September, they resided in their tribal "homelands" in northern areas. For the Awlād al-Fāqī, these homelands were located near the provincial towns of Timbédra and Néma, in the far east of the country. With the onset of the *shita* ' (winter) season from October to February, they joined various caravans traveling southward with their animals in

search of adequate pasturage. The migration extended further south during the *sayf* (summer) months from March to June.

These caravans would "descend" for days or weeks at various wells that were interspaced across these southern territories. While many wells in this space stood isolated in the landscape, others were surrounded by permanent settlements of sedentary agriculturalists, including Haratīn villagers, and further south, by Bamanan groups. Bidhān nomads revisited these locations annually, engaging in hospitality and exchange with local populations. The more intense the summer was, the further south nomads would venture in any given year.

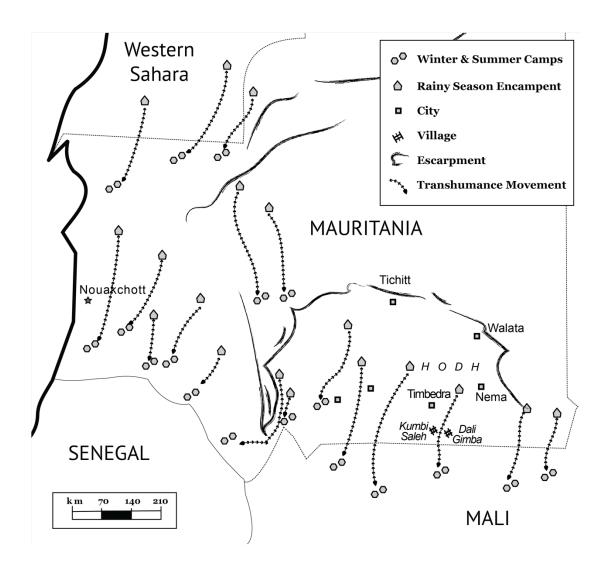


Figure XXIV: Nomadic Transhumance Migration Patterns in the Saharan West

Elder villagers in Dali Gimba recounted that beginning in the 1970s, a confluence of environmental, economic, and political factors significantly impacted the nomadic way of life. The "great Sahelian droughts" of the late 1960's and early 1970's were particularly devastating, resulting in a loss of a substantial portion of the country's livestock (Panzanitta 2008, 302). In response to these drought conditions, Hodhi nomads were compelled to migrate further south during summers in search of adequate pasturage.

However, as villagers in Dali Gimba recounted, this period also saw increased border securitization, raiding, and taxation by the Malian state, which severely restricted the movements of Hodhi nomads. Following the independence of Mauritania and Mali in 1960, the newly established states inherited territorial demarcations by the French colonial administrators who did not rigorously lay out the dividing line in the Saharan frontiers of the two countries (Ibid., 285). The early 1960s witnessed escalating disputes between the two countries, especially in regard to the boundaries of the Hodh province, the migratory rights of Hodhi nomads, and the territorial ownership of key wells in the region, leading to diplomatic tension between the two states. The dispute was formally resolved with the Treaty of Kayes in 1963, which elucidated the border through a recognition of Mauritania's cession of some land with key wells in the Hodh to Mali (Ibid., 286, Zartman 1963). Uncertainties over the precise nation-state borders persisted until a second treaty in 1993 (Panzannita 2008, 286).

Although a 1958 convention had formally granted free access to Hodhi nomads to these areas, in practice, they often faced raids and tax demands from neighboring camel cavalries. As drought conditions pushed nomads further south, they adjusted their migratory strategies to avoid these raids, such as by traveling through the night. Some blind Ummārīs with extraordinary olfactory abilities used their sense of smell to detect and avoid raiders.

It was in this context that Muhammad Mahmud joined Muhammad Mukhtar to spearhead a movement to transition from a life of nomadism (*ḥayāt al-irtiḥālī*) to a life of settlement (*ḥaḍar*), specifically in regions midway between the north and south poles of transhumant migration, yet north of the Malian border. This was a daunting task because as a villager

recalled, "the land was 'dead' (*miyyit*)— there was no water there. The thirst ('*atash*) was intense." The area only had a few "old" wells (*hisyān qadīma*) that could support passing traffic but were insufficient for sustained settlement. As such, the success of establishing villages and maintaining settled life critically depended on the widespread development of well infrastructures across the region. Central to this endeavor was the practice of water divination, which was essential for producing reliable knowledge about the subterranean environment, locating viable sources of water, and planning development in the badiya space.

In the 1970s, Muhammad Mukhtar's influence expanded significantly, attracting a diverse following from scores of men and women, especially from Awlād al-Faqī families living in the Hodh. These individuals formally pledged spiritual allegiance (*bay*'*a*) to the shaykh, but their discipleship did not proceed through tajrīd. Instead of living with the shaykh and suffusing one's life in direct and personal khidma to the shaykh, their disciple-shaykh relationship manifested through mutual visitation (*ziyarat*), gift exchanges (*hadaya*), hospitality (*ikram*), and charity (*sadaqa*).

Muhammad Mukhtar leveraged his growing charismatic authority across the region to fund and organize the development of wells. To this end, Muhammad Mahmud used his divinatory skills to find ideal sites for wells and he contributed his expertise in designing village spaces. The process of founding wells was a joint exercise combining *karama* (miracle) and *karam* (generosity).

Muhammad Mahmud also had personal motivations for settling in a village. He told me that it saddened him that the blind and sighted members of his clan, the Awlād Ummār, were weak and scattered in different caravans lead by different tribes. In his telling, he shared a vision that he had in the late-1970s, during a journey with his friend Hammada, who was another early

acolyte of the shaykh. One evening, the pair descended at the old well of *Dālī Kumbā* in southern Hodh ech Chargui, thirty kilometers north of the Malian border, and nine kilometers east of the historic ruins of the ancient town of Kumbi Saleh, which is remembered as the capital of ancient Ghana, a great trading empire in western Africa that flourished from the 9th through the 14th century (Levtzion 1973; Conrad and Fisher 1983). In the late-1970s, the well of Dālī Kumbā was uninhabited and without any surrounding settlements. Like other wells in the region, its origins were old, and no clan claimed ownership or exercised special privileges to the well. On that night, Muhammad Mahmud declared that the location would become a home for all of the blind and sighted family members of the Ummār. "Ask Hammada! He will bear witness that I said it! In the seventies, when this idea seemed impossible!"

This story demonstrates how the transition to sedentary life and the establishment of villages were not just natural adaptive responses to changing ecological or social circumstances. Dali Gimba was also an intentional project of creating a space and cultivating a community especially for the families of the blind.

In 1982, Muhammad Mahmud began to effect this transformation by constructing the first permanent structures near the old well. He told me that he was drawn to the area because "its water was near, and sweet." Additionally, harātīn groups with longstanding relationships of dependency through former enslavement to the clan had already settled in villages to the south of this area. The following year, Muhammad Mahmud established a new well in the vicinity, called *Hāsī Muḥammad Maḥmūd*, which continues to issue water in the present day. Gradually, other kin of the Ummar began to build more permanent edifices in the area and spend more time in the village.

This pattern was replicated in areas across the southern Hodh. Muhammad Mahmud and Muhammad Mukhtar worked together to find and establish wells across the region, and different clans of the Awlād al-Fāqi began to develop permanent edifices in these areas. Some wells were established in places near existing "old wells," while others were founded in areas without any former wells.

Building Wells

In the Saharan world, the construction of wells is a process that not only establishes a means of accessing water, but also functions as a primary mode of land acquisition. Investors who founded wells typically asserted the right of privileged access to its water and certain claims to the surrounding land for their clan. This principle is articulated in the hadith of the Prophet, "land belongs to whomever enlivens it" (*al-ardu li man aḥyāha*).¹⁶⁰ As further explained by one villager, "And how do you enliven something? By giving it water." According to this principle, those who invest the labor and resources to dig and maintain a well gain access and ownership of that land, provided that it was previously uninhabited and considered *mayyit* (dead) (ould Al-Barra and ould Cheikh 1996).

Ownership of wells however does not confer exclusive rights over their water; it establishes a priority of access. When kinfolk of a well's founder arrive at a well, they acquire the first and most immediate claim to draw its water. Beyond this, there exists a widely recognized customary right known as the "right to drink" (*haq al-sharab*), allowing all humans and animals access to quench their thirst, at least for their immediate needs. This principle imbues wells with a public and accessible character, where even tribal adversaries are not denied

¹⁶⁰ This maxim is expressed in numerous hadith, such as one reported by Mālik in the *Muwațța*: "Whomever enlivens dead earth thus becomes its owner" (*man ahy 'a ardan mayyita fa-hiyya lahu*) (Hadith 2173, Book 35, Chapter 24).

water. Even competitive and antagonistic tribal relationships were often suppressed at the site of the well (Taine-Cheikh 2004, 110). For this reason, the act of establishing a well is interpreted as an act of generosity (*karam*) that provides the social benefit of water for all humans and animals. Founders of wells are celebrated as righteous ($s\bar{a}lih\bar{n}n$) and people of goodness (*rijāl al-khayr*).

When Muhammad Mukhtar established wells, he relinquished any claims of ownership over the land. The wells were gifts graced to the people of the Awlād al-Fāqī, a generosity which in turn solidified his status as a charismatic Sufi saint. While social studies of Sufism often highlight food provision, healing, and conflict resolution as ways Sufi masters establish client relationships and territorial influence (Chih 2020, 205), in the Hodh region, the development of well infrastructures and the "enlivening of the earth" stand out as the primary service through which the Sufi master gained ascendancy.

Integral to the transformation of the land under Muhammad Mukhtar's guidance was the renaming of places, by replacing toponyms that connoted scarcity with toponyms that instead signified abundance, especially in relation to water. An illustrative example is the village known as "Sutta," which was named after a small Saharan bird to symbolize the meager water available from its existing well. Upon establishing a new well in the village found by Muhammad Mahmud, Muhammad Mukhtar rechristened the village as "Bosta," meaning "expansion." Today, the village has become one of the central towns of the Awlād al-Fāqī.

A similar transformation occurred with a place formerly known as "*Fadalāt*," a word that means "wasteland." Muhammad Mukhtar renamed the village as "*Mudgadmāt*," meaning "advancement." Today, this village serves as the home of the Sufi master's living son, Muhammad Saʿadna, and serves as a primary destination of ziyārāt for disciples. These changes in toponyms are not merely symbolic but rather represent the ecological and social

transformations of the region, with each new name capturing the essence of the area's revitalization and the community's renewed relationship with the land and water.¹⁶¹

1984: Embracing Tawakkul in The Year of the Drought

Although numerous wells and permanent structures were established in various sites across the southern reaches of the Hodh, bādiya inhabitants were not accustomed to remaining in the villages year-round, especially during the sweltering summer months. As Muhammad Mahmud recalled, it was difficult to convince the people to remain settled in new village spaces during the summer season, as many still preferred to migrate to cooler regions in Mali. In this context, the principles of zuhd and *tawakkul* (reliance on God) were promoted as ethical imperatives to remain settled. Muhammad Mukhtar and Muhammad Mahmud framed nomadic migration as a weak stance of dependency on people rather than Allah.¹⁶²

This perspective was most vividly illustrated during the notorious "year of the drought" ($`\bar{a}m \ al-jaf\bar{a}f$), which struck in 1984. That summer, newly settled villagers faced severe hardships: wells issued very little brackish water, grain stores dwindled, and the few animals they had grew emaciated. The fledgling Ummārī community in Dali Gimba was warned of imminent peril, "If you do not leave, you will perish." However, as Muhammad Mahmud recounted, they remained steadfast and reaffirmed their reliance upon Allah. This resolve was seemingly rewarded late in July when a government car chanced upon the village, bearing officials who, upon witnessing the villagers' plight, returned shortly with substantial food supplies. It was the first encounter that the community had with the Mauritanian state. Muhammad Mahmud interpreted this event as a

¹⁶¹ See (Basso 1996) for an account of the role of toponyms in the cultural processes of place-making and rooting historical narratives in social space.

¹⁶² In the spirit of this ethic of *tawakkul*, bādiya dwellers also generally eschewed performing *şalāt al-istisqa*, or "the prayer of requesting rain." Although such a practice is found in the sunnah, it was typically avoided until conditions were extremely dire. As Muhammad Mahmud explained, praying the istisqa was a sign of impatience. Rain could be withheld by Allah for the sins of people, so droughts were to be first responded to through self-reckoning and repentance on the behalf of villagers.

divine affirmation of their tawakkul. He cited a hadith echoing this stance: "If you were to rely upon Allah with reliance due to him, he would provide for you just as he provides for the birds. They go out in the morning with empty stomachs and return full."¹⁶³ The year 1984 is etched in the memory of older residents of the bādiya, especially those who endured the drought by staying in the newly built villages. Those who remained recalled the event with an unmistakable sense of pride and strength. This year marked a turning point: the subsequent year saw a vast majority choosing to remain in the villages permanently.

Today, there are twenty-eight Awlād al-Fāqī villages surrounding Dali Gimba. This village network constitutes a new tribal spatial domain. Twelve of these belong to harātīn affiliates of the tribe that are located in the southern portion of this territory, while the remainder, including Dali Gimba, are positioned to the north. Westward, towards the historic site of Kumbi Saleh, lies another cluster of villages that is affiliated with the Awlād Dayyāt, a tribe linked genealogically to Awlād al-Fāqi. In this way, tribal genealogical systems have been spatially (re)distributed across the region via differential networks of wells and villages. Muhammad Mahmud is credited with locating most wells in these village systems, as well as others around the country.

Owing to his pivotal contributions to the establishment of wells and villages for the families of the Awlād al-Fāqī, Muhammad Mukhtār gained the title "Sayyid al-Qawm" (respected master) of the tribe. Following the shaykh's passing in 1992, Muhammad Mahmud continued his water dowsing activities, especially in regions beyond the Awlād al-Fāqi tribal space, in adjacent village networks in the Hodh, but also in Mali and in more distant provinces in Mauritania. During my fieldwork, it was evident in many areas I visited that the communities

¹⁶³ The hadith is found in Sunan Ibn Majah 4164, Book 37, Hadith 65

deeply appreciated Muhammad Mahmud's role in identifying sites for their wells. His legacy in water divining continues to resonate across these regions, underscoring the lasting impact of his and Muhammad Mukhtar's work in transforming the landscape and the lives of the people who dwell in it.

Understanding Water Divination

Muhammad Mahmud's practice of water divination is rooted within a Qur'anic

hydrological model. Once, when I asked him how it functioned, he pondered briefly before

answering by reciting a verse in a melodic tone:

And We sent down $(anzaln\bar{a})$ water from the heaven, and We have given it to you to drink, but it is not you who are its treasurers $(kh\bar{a}zin\bar{n})$. (15:22)

I reflected on the ayah, then followed up asking, "So-where does the water from under

the earth come from?"

He snapped back, "-Have you not heard what is said by Allah, magnificent and glorious

is He?" He cleared his throat, and began reciting again, this time from another verse:

And We sent down water from the heaven in due measure and then We caused it to stay in the earth and We are surely able to make it disappear (23:18).

Muhammad Mahmud further elaborated, "Water-it descends from the sky, then Allah

deposits it in hidden vaults (khazāin). It is found if you dig (hafara) and strike it by the will

(*idhn*) of Allah most high—in some places—as places are not equal in water. You understand?"

He followed up with one more verse in his rhythmic cadence,

And He it is who sends the winds as bringers of glad tidings ahead of His mercy until when it has lifted up a heavy-laden cloud. We drive it onto a dead land [*baladan mayyit*]— [transitioning to an ordinary tone] meaning, no plants [*nabātat*] in it— [switching back to rhythmic cadence] and We send down water on it, then bring forth with it of fruits of all kinds; thus, shall We bring forth the dead that you may be mindful. (7:57)

These verses framed an understanding of water's circulation, as it descends from clouds through rain, is deposited in hidden underground "vaults," and ascends upwards through wells.

According to Martin Lings, the Qur'an establishes a vital linkage between water, mercy, and revelation. Water's described descent (*tanzīl*) from heaven mimics the descent of revelation, which is also called *al-tanzīl*. The Qur'an also describes rain and revelation both as manifestations of divine mercy (*raḥma*), as both are "life-giving." He suggests that this symbolic linkage is not only abstract or metaphorical, but a material manifestation in reality. "Thus, water *is* mercy" (Lings 1968, 5).

When water descends into the earth, it is deposited in *khazā`in*, or hidden vaults within the strata of the earth. These domains are hidden because they are understood to reside in the *`ālam al-ghayb*, or "the Unseen world." As Muhammad Mahmud explained, the Unseen world is a special domain whose knowledge is fundamentally situated within the purview of God and fundamentally inaccessible to created beings.

Anthropologists of Islam have drawn attention to the concept of the Unseen and its lived reality as a domain constituted by paradoxical tensions between life and death, jinns and angels, activities of magic and dreamworlds, and the mutual constitution of invisibility and visibility (Pandolfo 1997; El-Zein 2009; Rothenberg 2004; Khan 2006; Mittermaier 2011, 2017; Taneja 2013). In a recent issue of *Contemporary Islam* (2017), contributors explore how the ambiguities of the Unseen in Islamic societies can contribute to the broader study of invisibility in social studies by serving as a methodological and analytical "point of departure for a wider exploration of the sensual, existential, spiritual and political interfaces and contradictions of visibility and invisibility within other religious and secular traditions as well" (Burbandt, Rytter, and Suhr 2017, 2).

In most of these anthropological approaches, however, the Unseen is conflated with various other domains of the invisible and the unknown. For example, the issue in *Contemporary Islam* begins with the definition, "The Arab concept *al-ghayb* refers to the hidden, the unseen, the invisible" (Ibid., 1). Muhammad Mahmud, however, emphasized that the Unseen is categorically distinct from other domains of the invisible. For instance, he pointed out that electromagnetic waves used in cell phone connection are invisible to the human eye but are not part of the Unseen because they are perceptible through other modes of sensing and reasoning. Similarly, he attested that the activities of the jinn, angels, or the world of spirits (*ʿālam al-arwāh*) also do not form a part of the Unseen world. While beings such as jinn are ordinarily invisible for humans, they are visible to one another. At times, they could even make themselves appear to humans. But, Muhammad Mahmud stated, the jinns and even the angels are created beings that are not privy to the knowledge of the Unseen.

He further noted that humans too could develop their perceptive abilities to access certain domains of knowledge that are ordinarily veiled from human sensation. For example, he suggested that someone who follows a strict regimen of zuhd in the external sense of intentional deprivation of the body could effectively repress the carnal desires and domination of one's "animal spirit" ($r\bar{u}h \ hayw\bar{a}n\bar{i}$), thus enhancing the inherent angelic qualities of the soul and opening access to forms of perception. They could, for example, hone their sense of *başīra* (insight), which is capable of perceiving the hidden aspects of reality, such as the private intentions of others.¹⁶⁴

In contrast to these invisible domains, Muhammad Mahmud attested that the Unseen is a domain exclusive to Allah's knowledge. He reinforced this distinction by citing two Qur'anic

¹⁶⁴ This conception of the soul as being divided into an animal capacity and an angelic capacity likely draws from al-Ghazāli's discourse on the soul as found in his book, "Alchemy of Happiness" (1991).

verses: "And with Him are the keys to the Unseen (mafātiḥu l-ghaybi)" (6:59), and "The Unseen belongs only to God" (10:20). In this way, the world of the Unseen is not just contingently unknown; it is "unknowable," except through receiving its "keys" from Allah, through a process of divine revelation.

Its contents relate to the essence of Allah, the mystery of creation, the source of revelation, the heavens, and matters of destiny. He clarified that these abstract concepts, however, congealed within five specific domains of the natural world, which are called the *mughayyibāt al-khamṣa* (the five hidden things). These are enumerated in a verse from the Qur'an:

Verily with God alone rests the knowledge of when the Last Hour will come; and He [it is who] sends the rain; and He [alone] knows what is in the wombs, whereas no one knows what he will reap tomorrow, and no one knows in what land he will die. Verily, God [alone] is all-knowing, all-aware. (31:34)

According to Muhammad Mahmud, this verse identifies five specific domains of the created world that are essentially enshrouded in indeterminacy. He argued that human sciences have made immense progress in acquiring knowledge about a variety of natural phenomena, yet sciences dedicated to these five things remain notably limited. They are eschatology and knowledge of the end of time; meteorology and forecasting the rain; embryology and knowledge of the womb; predicting markets and determining economic futures; and finally, knowledge about one's own personal fate of death.¹⁶⁵ He added that the subterranean vaults of groundwater are integral to the domain of the rain, and thus are also part of the Unseen world.

¹⁶⁵ Another villager pointed out that this view is further supported by the state of modern science: more has been discovered about outer space than matters of the subterranean world. Likewise, he suggested, obstetrics, meteorology, and market predictions are fields of science that are notorious for the unreliability of their predictions and lack of broad explanatory theories.

Accessing Knowledge of the Unseen

Because groundwater is hidden in vaults of the Unseen world, accessing them requires divine intervention. It draws upon knowledge practices in the form of *ma* '*rifa* (gnosis) — a spiritual understanding granted by Allah. Muhammad Mahmud recognized that water divination is an indeterminate and obfuscated process. Unlike many dowsing traditions rooted in the West whose practitioners have developed sophisticated frameworks for explaining the workings of their practice in rational, technological, and pseudoscientific accounts (Krautwurst 1998: 72), Muhammad Mahmud generally avoided speculating about the workings of his practice with much specificity. He explained that this attitude was partly out of a sense of humility, to avoid speaking too freely or seeming boastful about something that he recognized was a gift from God, and essentially not his own possession. More fundamentally, it stemmed from his acknowledgment of the human epistemological limits in comprehending the Unseen. He believed it was impossible to fully grasp the inner workings of this realm, even for someone who received knowledge from it.

The source of Muhammad Mahmud's ability to divine water was also viewed in various ways. Many attributed it to the Ummārī karāma and described it as an innate capacity that was evident since childhood. Others, however, such as his lifelong friend Ahmed Hafiz, believed that Muhammad Mahmud's capacity of water divination critically depended on his profound engagement and embodiment of the Qur'an. Hafiz argued that Muhammad Mahmud's constant recitation and teaching of the Qur'an nurtured a state of emptiness and powerlessness (*i'jāz*), that transformed him into a conduit for divine will worthy of receiving the "keys to the Unseen" from Allah. He supported this view by citing a hadith of the Prophet:

My servant does not cease drawing near to me through supererogatory acts of worship until I love him. Then when I love him, I become his hearing with which he hears, and

his sight with which he sees, and his hand with which he grips, and his leg with which he walks.¹⁶⁶

Ahmed Hafiz pointed out that no blind Ummārī ever had the ability to divine water, or the plethora of other divinatory abilities that Muhammad Mahmud was capable of performing. Moreover, water divination was one of the several miracles or extraordinary sensory attunements that Muhammad Mahmud possessed. Others included the ability to comprehend the language of the birds, the ability to smell types of soil and identify the exact region of the Saharan West they originated from, the ability to invoke the rain by reciting certain words on stones, proficiency in various kinds of esoteric healing through ruqya, and the ability to provide exegesis of the Qur'an.

Hafiz argued that Muhammad Mahmud's numerous abilities stemmed from his special attachment to the Qur'an, through reciting it, teaching it, animating it as recitation, or deploying it artfully in speech. In Hafiz's estimation, these practices allowed Allah to become the "sight with which he sees." When I presented this account to Muhammad Mahmud, he chuckled and acknowledged its possibility, but stated that he did not know.

Muhammad Mahmud's mastery over Qur'anic Arabic and his dexterity in deploying its language is consistent with observations that anthropologists have made regarding diviners in general. Barbara Tedlock, for example, notes that diviners are,

[s]pecialists who use the idea of moving from a boundless to a bounded realm of existence in their practice. Compared with their peers, diviners excel in insight, imagination, fluency in language, and knowledge of cultural traditions. (2001, 191)

This description resonates with Muhammad Mahmud's profile as a diviner, emphasizing his exceptional linguistic and cultural understanding. During my fieldwork in Mauritania, I encountered other renowned water diviners like Muhammad al-Fāḍil from the Hodh. Unlike Mahmud, al-Fāḍil's divinatory skill was a patrilineal inheritance, passed down from his father

¹⁶⁶ This hadith is found in the popular compendium, "Forty Hadith Qudsi," Hadith 25.

and subsequently to his son. This mode of transmission was thought to incorporate both transmission through the blood, as well as through acquired expertise. This contrast highlights the diverse origins and manifestations of divinatory abilities in the region.

Ethics of Water Divination

Muhammad Mahmud's approach to water divination was deeply rooted in an ethical framework that drew on Islamic teachings, Qur'anic guidance, and Sufi virtues regarding the value of water and social benefit.

Muhammad Mahmud interpreted the practice of water divination as an extension of the general act of searching for water. He related the two by stating, "Searching for water is an obligation on every believer. Every act of prayer (*salāh*) begins with the pursuit of water." In Islam, ritual purity achieved through ablutions (*wudu*) using water is a prerequisite for performing salāh. This makes the quest for water a critical first step in the process of prayer. Upon hearing the adhān, those who are vigilant about their prayers instinctively gesture to look around for a container of water. Since the salāh is a personal obligation, the responsibility to locate water for ablution also becomes a personal commitment. Manuals of fiqh provide guidelines on the considerable distance one ought to travel in search of water before resorting to *tayammum* (dry ablutions with earth or rocks) in place of wudu.¹⁶⁷ The act of finding water and performing wudu are integral aspects of the ritual şalāh, especially because the quality of one's ablutions is a crucial determinant of the quality of one's prayers. Finding water is not only a pragmatic or logistical task, but a practice imbued with religious significance and spiritual value.

¹⁶⁷ To note, Mauritanians are notoriously lax on these demands and regularly practice tayammum even when water is readily available.

Muhammad Mahmud also viewed his practice of water divination not only as a technical skill, but as an act imbued with social responsibility and grounded in Qur'anic teachings about water as a manifestation of divine mercy akin to revelation. The specific material, social, and spiritual qualities of water as a substance was crucial to his divination practice. For example, Muhammad Mahmud's divination ability was not limited to water. He informed me that on his divination consultations, he often detected deposits of gold, silver, iron ore, gypsum, copper, oil, and meteorites. Despite their high demand and economic value in Mauritania, he told me that he rarely disclosed these findings to clients. During various gold rushes that have swept across the Saharan West in the past few decades, especially since 2015 (Heidi 2023), many people sought his divining expertise to locate precious metals, but he consistently refused. He suggested that although gold is valuable in society, he believed that its exploitation only enriched certain individuals and offered little benefit to the society at large. Moreover, he was weary of using his gift to locate things like gold because he feared that this could easily lead to participation in *fasād* (corruption) and conflict.

In contrast, the discovery of water, as Muhammad Mahmud saw it, was universally beneficial. It only brought goodness (*khayr*). He interpreted his ability to divine water as a gift that was intended to channel sources of divine mercy for all people, animals, and the earth that benefit from the flow of water and the enlivening of the earth through wells. He felt a profound sense of social obligation (*amāna*) stemming from his ability to locate groundwater. This ethical commitment was evident in his professional conduct: he often accepted whatever payment was initially offered by clients without negotiation and frequently provided his services pro bono, particularly for first-time clients. Through this approach, Mahmud not only sought to find water but also to embody the spirit of service and mercy inherent in the act of divination.

Water Divination Observed

In 2021, during a brief visit to the village, I had the long-awaited chance to observe Muhammad Mahmud in action during a water divination consultation. The following narrative, framed in the present tense, captures the event's unfolding moments and situates the practice in the temporality of the present:

It is late at night in Dali Gimba when Cheikhna bursts into my mbār, excitedly announcing that Muhammad Mahmud has received a request for water divination. The news quickly spreads, stirring anticipation among villagers who are aware of my eagerness to witness the event. The request comes from a resident of Boû Steïlé, a bustling trading town and the local municipality's capital, located eight kilometers north of the Malian border. We plan to set out early the next morning.

Following the Fajr prayers, Mahmud enjoys his morning *atay* on his mbār's porch, briefly meeting with a few Qur'an students eager to present their lessons before his departure. He then settles into the passenger seat of his Toyota Prado, where the driver and I await. The journey to Boû Steïlé takes about an hour, coinciding with the town's bustling weekly market day. Flocks of cars and trucks coming from all different directions create traffic at the entrances of the town.

We pull over to a hill northeast of the animal market, and Muhammad Mahmud phones the client. He informs us that his son will come find us and direct us to the parcel of land. After twenty minutes, the young man locates our vehicle and climbs in. We drive to an open hilly region just outside the bustling commune.

The young man explains that the family purchased this hectare a couple of years ago with the intention to develop the land for residence, however, there were no nearby wells or municipal water sources in the area. A well was needed to make living in the area sustainable. So far, they drilled in two locations on the plot, once going 15 meters deep, and the second going as deep as 29 meters but, to their disappointment, had yet to strike water. The young man voiced misgivings regarding the purchase of the plot and doubts over the possibilities of finding water.



Figure XXV: Water Divination in Boû Steïlé The client's son holds his hand and describes the terrain, indicating the bounds of the property. A cleft in the earth marks the site where a previous attempt to find water failed. Photo by Saquib Usman. Arriving on location, the client's son takes Muhammad Mahmud's hand and guides him around the property. They begin with the locations where they had already tried to drill.

Muhammad Mahmud inquiries about the property's topography and landmarks and shows a particular interest in the species of trees and their distribution in the wider area. They traverse the plot, following in straight lines. Muhammad Mahmud walks cautiously, with an especially apprehensive gait, extending his feet outward as he steps so that he can feel the surface of the earth through his sandals.

When they reach the edge of the property, they turn around and continue along a new path. He asks the client to direct them toward the patches of bare dirt amidst the grassy cover of the rainy season. At these spots, Muhammad Mahmud pauses to kick into the dirt a few times before moving onward. Tactile contact and auscultating the soil are crucial to his process. Occasionally, he lists different types of sediment and subterranean features that he encounters through his sensorial walking exploration.



Figure XXVI: Water Is Found Photo by Saquib Usman.

About ten minutes into this meticulous process, Muhammad Mahmud halts at a particular spot. He lets go of the client's hand and kneels to the ground. He pats the earth and begins

uprooting grass. He nods and affirms, "There is ground water" (*hunāk miyāh jawfiyya*). He requests a stick and continues to clear away the grass. He repeats, "There is groundwater, perhaps." Muhammad Mahmud looks up and notices a form off in the distance. He asks, "What tree is that there? Is it *Ammourāya*?" The client looks and offers a lateral click in affirmation. Finally, after shaping a small bowl-sized hole at the spot, Muhammad Mahmud draws two intersecting lines, in the shape of an "X." He turns to address me, "Oh Ali! This is the line that proceeds—*What Allah has willed!*—to water. In the earth, to its origin. Naturally, it proceeds to the layers of the earth until the water. Those who dig with their hands, they see this line in the rock."¹⁶⁸

Standing up, Muhammad Mahmud estimates that the water is between 18 and 27 meters deep, and assures the client that this is good news, because this depth is relatively shallow for the Boû Steïlé region. He also mentions that he was concerned that the water in the area would be too saline but is now relieved because the water that will be found in this location will be "sweet" and "cold."

After marking this spot, Muhammad Mahmud and the client's son continue their inspection of the remaining part of the property to verify if any other locations may be superior to the first. He locates one other spot where the water table is closer but deems it to be inferior to the first location because its water is not as plentiful or sweet as the first location.

The client's son expresses his gratitude, advises us to discuss payment with his father, and departs on foot. We climb back in the car and head back to the center of town, which is bustling with market activities. Muhammad Mahmud tries calling the client but finds his phone to be out of service. We decide to run errands in the market and purchase some grilled meat for lunch. As we wait for the client, Muhammad Mahmud (MMH), the driver (Sidi), and I (Ali) have the following conversation:

Ali	Bibby, do clients usually pay for water finding services now or later if and when
	the water is found?
MMH	Now – he will pay today!
Ali	And when civil engineers (muhandisūn) or diviners offer consultations and locate
	spots for people—if they dig and water is not found, do they come back?
MMH	There are a number of questions about water. Is it in front of them (amāmahum)—
	is it still in front of them? Or what? — Praises to Allah (alhamdulillah) — they
	find it.
Sidi	(Interjecting) No—Ali's question is—What happens if water is not found?
MMH	Look — Most of the time from me, it succeeds (yanjah). Wallahi. When people
	call me back, it is to find another location after the first water is discovered.
Ali	How much do people usually pay?

¹⁶⁸ In Arabic: "ya alī! hādhā al-khatt, hum yamshī —māshā Allah—ilā al-ma', fil ardi aslan - tabiyiyyan yamshi - al-nasu aladhi tahfaru bi aydiha - hiya tara hadha al-Khatt, fi sakhra, samma. Huwa yamshi ila tabaqal, al-ard hatta al ma."

MMH	Anything! Whatever they want to pay. I do not ask for anything. Whatever they
	determine to be its compensation-you know-I came on a long car ride, the heat
	is intense today—and I am <i>fatigued</i> !
Sidi	The people don't know — they often don't give its value! People, if they go to
	othersif they go to companies, and civil engineers, and hydrographers, who have
	instruments (<i>jihāz</i>), they would pay them a huge payment for this! <i>Iski</i> !
MMH	Truth on that! 500,000, or even 600,000 ougiyya.
Sidi	Wallahi—Yes, just recently a man paid 180,000 to an engineer to prospect a well.
	To Muhammad Mahmud—this man—though, people may give just 5,000 or
	10,000 ouguiya.

Muhammad Mahmud also comments on the issue of accepting payment for performing water divination services by arguing that such a practice has definitively been deemed *mubāh* or "permissible" by the authoritative jurist Sidi Abdullah ould Hajj Ibrahim (d.1816). He narrates a fatwa from the scholar's book of *nawāzil* (juridical responses) which discusses the legal status of various economic transactions in the Saharan context under Maliki law (Lydon 2009: 303). He draws an analogical relationship (*qiyās*) between water divination and *ruqya shar 'iyya*, which is the recognizably permissible practice of esoteric healing that especially uses water and Qur'anic recitation to treat illnesses caused by jinn possession (*junūn*), magic (*siḥr*), evil eye (*al- 'ayn*), demonic touch (*lams*). Muhammad Mahmud reasoned, "Healers and doctors are paid for providing diagnoses, prescriptions, and giving treatments. Their compensation is not contingent upon successful outcomes for their payments. The same is true for water divination."

After three hours without contact from the client, we finally locate him in his brother's shop. The client discusses his challenges in establishing a well and the financial strain of his investments and recent business. Muhammad Mahmud reassures him about the location marked for digging. The client takes out a pre-folded wad of cash from his breast pocket and places it in Muhammad Mahmud's hands. He humbly nods in acceptance, offers his thanks, and folds the wad of cash in his pocket. We exchange greetings and depart.

Back in the car, he hands me the money to count—it is 4,000 ouguiyas, or about \$110 USD. We use up 2,500 on gas and spend the rest on food and supplies needed for Cheikhna's upcoming wedding, which is to commence on the following day. We head back and reach Dali Gimba by the late afternoon.

Water Divination as a Sensory Activity

Divinatory forms of perception are often imagined as a mode of perceiving an alternative world that contravenes that which appears to the external, ordinary senses.¹⁶⁹ Muhammad Mahmud's practice of water divination, however, is a profoundly sensory practice, involving the body, that engages directly with the material world. Unlike many other traditions of water dowsing around the world that rely on objects such as dowsing rods or forks, Muhamamd Mahmud uses his own body as the instrument of perception. He also depends on knowledge gleaned through other modes of observation, such as awareness of the distribution of trees, and other physical features of the geography that can help guide the divination practice.

Muhammad Mahmud's water divination does not involve a withdrawal from the bodily sensory experiences of the body, but rather invokes an exceptional perspicacity and hypersensitive awareness of the body and the qualities of the material environment. It is not a looking away, but a looking towards the world. More specifically, it is a *touching* towards the world.

The hidden "unknowable" domain of the Unseen that the divinatory practice channels is not an intangible, untouchable, or imaginal elsewhere, but rather the weighty and substantive domain of the earth upon which we walk. Penetrating touch through movement of the feet is primary to the sensory perceptive process. It proceeds in a manner that resembles the apprehensive mode of walking that is typical to blind practices of navigation discussed in Chapter Five. In this way, it diverges from common images and conceptions of divination that represent the practice through the language of visuality, such as in the terms: visionary, seer, prevision, foresight, clairvoyance, revelation, insight. In contrast, Muhammad Mahmud's

¹⁶⁹ Consider the way in which divination or oracles are depicted with eyes that go blank, such as in the depiction of the "Three-Eyed Raven," a divinatory character from the TV series, "Game of Thrones" (Graves 2014).

divinatory practice is produced through the alternative sensory mode of tactility. Perhaps more fitting words to associate with this practice could be, "haptican," "feeler," "foretouch," or "intouch."

Water Divination as Prophecy

Secondly, Muhammad Mahmud's practice of water divination extends beyond merely discerning the present environment; it also serves as a form of prophecy, channeling the past, present and future of a specific location. When he identifies a location for well-digging, he produces a statement not just about the existence of water there, but also a vision about the future, that water will be found in that location, and it will serve as the future location of a well. These prognostications transform the imagination of the potential of a piece of land from a space of death to a space of life through channeling water hidden in the earth.

The divinatory perception also penetrates the past, connecting with vaults of groundwater in the earth that are sourced in former events of rainfall. Water divination not only serves to locate water, but it fosters the circulation of water through the hydrological cycle by making hidden vaults of water accessible to society. The prophecy remains in a state of potentiality so long as water remains undiscovered in the location. The moment water is found, the prophecy is actualized and validated, and is cemented into the historical narrative of the well and its surrounding environment.

The water diviner selects a location from the field of possibilities in the confines of a plot of land. His services are only sought out in contexts of water precarity. In other contexts, where the water table is near and accessible, people can select almost any location and find water. However, in difficult contexts where water could not be found and futures were uncertain and uncontrollable, water divination offered a trusted means to pave a new path forward. This

interpretation also corresponds with David Zeitlyn's approach to divination as a "technology that assists decision making." It provides clients with an external mechanism of freeing oneself from "the anguish of an uncertain future. Jean-Pierre Boutinet (1990: 337).

Interpretations and Effects

Water divination, as practiced by Muhammad Mahmud, presents a distinct form of miracle that contravenes conventional understandings. Often, miracles are understood as discriminatory tests of faith. For example, Michael Gilsenan offers the following account of karāma based on ethnographic study of grace and Sufism in Egypt:

It is the characteristic of the miracle to break the everyday routine and pattern of things by showing the unseen but "true" form that lies beneath. In this sense we might say that the miracle or the karamag [sic] is like a miniature passion play - a dramatic, vivid illumination of what is otherwise concealed but from time to time punctuates and comments on the nature of ordinary worldly reality. They offer a reminder, a basic marker of the "real" essence of the universe. These signs transform life, if only briefly. (1982, 79).

In Gilsenan's account, miracles are understood as singular events that disrupt the everyday order. These events are witnessed by some, conveyed, heard, interpreted, remembered, believed, and denied. Within the Hāmidiyya Shādiliyya Sufi order he studied, the possession of karāma is seen as an exclusive quality of the Sufi master (*shaykh al-tarīqa*). As he states, "It is crucial that the saintly founder alone be granted monopoly over such powers" (Ibid., 82). In this formulation, belief in the karāma of the shaykh is a critical criterion of inclusion within the Sufi network in the same way that belief (or disbelief) in the miracles of the Prophets serves as a distinguishing criterion of inclusion and exclusion in religious denominations. Because the primary purpose of this kind of miracle is to serve as a test of faith or a way to strengthen the certainty of believers, they are often expressed in performative acts or spectacles that have limited pragmatic or social functions beyond this purpose of belief.

Rytter echoes this prioritization of belief in miracles by contending that the efficacy of miracles may critically depend on sincere belief in their truth. For example, he argues that for Sufis in Denmark, relics of hair gain affective presence and agentive power because the hair is believed to belong to the Prophet (although it "is obviously not the Prophet") and is thus believed to emanate *baraka* (blessings) and bring religious experience and affect to people who come in contact with it (Rytter 2017, 49).

While miracles like this work because they are believed, the miracle of water divination is "believed" or trusted because it worked. Pragmatic efficacy of water divination was the main way that Muhammad Mahmud verified the authenticity of the practice: "It works." The truth of water divination is not disclosed in the performance of the act, but in its tangible effects. It is proven from the water that issues from wells that were dug based on his guidance. This explanation sufficed for his former and prospective clients, who were usually in great need of water. For them, his good reputation, credibility, repeat customers, and success stories were all the proof that was needed. The primary function of water divination is not to adjudicate, test, or strengthen belief, but to produce tangible material effects, and fulfil clear social and pragmatic functions.

Furthermore, unlike the form of karāma defined by Gilsenan and others which is the exclusive possession of a saint (walī), the possession of karāma amongst the Awlād Ummār does not require or indicate the rank of sainthood. Muhammad Mahmud was not considered to be a saint or Sufi master but was rather an acolyte of the Sufi master. The karamāt of the Ummār are not limited to an elite social-spiritual rank, but was accessible to any blind Ummārī, or any man, woman, or child whom Allah had chosen. This broader accessibility of miraculous abilities

signifies a departure from the idea that such powers are exclusive to spiritual leaders and indicated a more inclusive understanding of divine intervention and spiritual gifts.

The karāma of water divination is a social benefit given to the people. For Muhammad Mahmud, it was a practice of khidma, a service to the community at large. It was an act of distributing mercy by facilitating the flow of water through the hydrological cycle. Its status as a karāma is conferred not only by its historical framing as a disruption in nature, but more importantly in its experienced reality by the people as a form of generosity (*karam*) and grace (*karama*).

After having finally observed Muhammad Mahmud's water divination practice, I learned that observation of the practice firsthand neither confirms nor denies the veracity of the practice. It is unlike the kind of occult practice of sorcery considered by Levi-Strauss where a sorcerer claims to suck out a foreign object from the body of the patient, but the object is actually a stone that is hidden in the mouth of the sorcerer, which poses an epistemological quandary for the ethnographer (1963). Here, there is no stone to be discovered. Nor did witnessing the practice firsthand provide any definitive understanding of how the perceptive act works. Instead, the only testament of water divination lies in its effects, in wells and water it produced, and its real and historical social role in transforming the badiya environment from a space of death into a space of life. Just as locals pointed to scars on the legs as evidence of a blind life instead of their eyes, so too does water divination find its explanatory power in the material and social effects that it produces rather than the appearance of the water divination practice.

While this narrative may not offer clear-cut validation or a rational explanation of water divination, it underscores the limitations and partiality of perception and observation. Water divination reminds us of the Unseen dimensions of reality and the inherent indeterminacy and

obscurity in both vision and divination processes. Even after observing the practice, the practice remained enshrouded in doubt and indeterminacy.

Epilogue

l-gharibu a'ma, wa lāu kāna basīr The stranger is blind, even if they are sighted. (Arabic Proverb)

Lā bud al-zāwī min kannashi yajmaʿu fīha ʿilmun, wa huwa māshī It is necessary for the scholar, with his notebook. He gathers in it knowledge, and then he departs (Saharan Couplet)

Imagining a Country of the Blind

In the short story, "The Country of the Blind" (1904), H.G. Wells tells the tale of Nunez, an adventurous mountaineer who falls off the face of a cliff during a climb in the Andes and descends into a mysterious valley inhabited by a people who are all blind. According to legend, a natural disaster had cut off the verdant valley from civilization, and thereafter a strange disease spread among its population which caused congenital blindness. Over time, sightedness gradually died out, and the people fully adapted to their blindness, so that they "scarcely noticed their loss." After fifteen generations, the notion of sight, visuality, and color had been completely forgotten. This is when Nunez stumbles upon the village.

At first, Nunez assumes that he will possess an advantage over the valley dwellers. Throughout the story, he repeats an old proverb to himself and others: "In the Country of the Blind the One-Eyed Man is King." However, when he tries to teach locals about sight and vision, he is dismayed to find them respond with disbelief and hostility. They dismiss his statements about the outside world and reject his claims about the appearance of the mountains and the sky. They find his eyes to be abnormal and pathological, and his senses imperfect and hallucinatory.

Eventually, Nunez abandons trying to explain sight to the locals and learns to live among them. He falls in love with a woman of the village, Medina-sarote. However, this match is prevented by the elders, who object to Nunez's incessant and blasphemous obsession with what he calls "sight." The village doctor suggests that Nunez can be cured of these delusions and gain approval to marry the woman with a surgery to remove his eyes. Although he initially refuses, after being coaxed by Medina-sarote he reluctantly accepts the offer as a necessary sacrifice for being with her.

On the morning of the operation, however, Nunez is struck by the resplendent beauty of the sky. He changes his mind and decides to escape the village. On his ascent, he turns to take one last glance at the village and Medina-sarote, who has now "become small and remote." He turns to climb back up the mountain from whence he first came down. He climbs all day until his body is defeated. He lies down to die, smiling with the contentment of having escaped the village.¹⁷⁰

Over the past few years of doing research and living in Dali Gimba, I have found myself repeatedly returning to "The Country of the Blind." The story's exposition offers a thoughtprovoking frame to consider the encounter of sightedness and blindness and how these concepts serve as a symbolic ground to explore questions about the perception of reality, the nature of subjective experiences, and how deeply ingrained beliefs come into conflict with one another.

Dali Gimba resembles Wells's fictional country in several ways: it is a unique space marked by the predominance of a blindness that is hereditary and congenital, and passed on for several generations. It is even called "the village of the blind" (*qariyat al-'umyān*) among people

¹⁷⁰ In an alternative, revised version of the story published in 1939, Nunez spots a major crack forming on the mountain during his escape, and returns to warn the villagers, but they again dismiss his "imagined" sight. He escapes with Medina-sarote, and the country perishes under the rockslide.

in the Hodh and in national media. Additionally, Dali Gimba is located in an area that often appears overwhelmingly remote to the outside world. I identified with Nunez at times, as an adventurous sighted observer who chanced upon an exceptional place, lived there as a guest, made observations, and departed.

For Rod Michalko, Wells's story has a special allure because it conceives of a unique environment where sightedness is "dramatically immersed" in a world of blindness:

Most people are not blind, and the meaning of blindness is understood within the social context of its rare occurrence. Thus, the meaning of blindness is wrapped in the cloak of its immersion in a "sighted world." This immersion is always dramatic. Wells's story is particularly revealing in that he reverses this dramatic immersion. (1998, 8)

Although blindness is not universal in Dali Gimba, and the village is not a bounded space by any means, blindness is still consistently salient. Nearly half the population of the village is blind, sighted men are often away from the village for much of the year, and sighted women who are married and counted in this population usually live in the village of their husbands. Moreover, within certain interactional scales blind participants are indeed the majority. During my time living on the compound of Muhammad Mahmud, for example, I regularly found myself in scenarios where I was the only sighted participant present, and my sightedness was "dramatically immersed" in a blind world in roughly the way Wells describes. On a larger spatial scale, of Dali Gimba and its surrounding villages, blindness is minoritized, but the awareness of blind subjects remains active. In these social contexts, blindness and sightedness are both a common occurrence and neither is an anomaly. The constant presence of blind people in the social space dissolves the normative illusion of living in a "world of sightedness," where blindness is encountered as an exceptional and spectacular aberration from the norm.

Beyond this expository set-up, however, my experience parts ways with that of Wells and Nunez. This divergence likely stems from our alternatives methodological approaches to study

this kind of world: Wells hypothesizes the country of the blind through imagination and speculative fiction, whereas I approach the village of the blind through ethnographic immersion, observation, and intimacy. Moreover, tracking the divergences in our accounts identifies specific points at which the ableist imaginary fails to understand blind experience and the role of vision in knowledge of the world.

In Wells's story, Nunez grapples with the truth of the proverb, "In the Country of the Blind the One-Eyed Man is King." The statement is repeated five times in the short story. Over the course of his time in the village, Nunez discovers that he is not able to establish control and dominance over the blind with his sight, because the blind are beholden to their ignorance. In the end, Nunez leaves with the same sight that he came with. The primacy of vision is reaffirmed, even at the cost of death.

Blindness, Estrangement, and Sight

In closing this work, I would like to consider the logic of a different proverb that I heard during my fieldwork in Mauritania:

Once I was walking in Nouakchott with Cheikhna. Navigating Nouakchott on foot is an arduous task. Only a couple major streets in the city are known by name. Instead, directions are communicated by crude pointing and hand waving. We walked holding hands as we found our way to our destination. I read aloud signs and words printed on buildings, while Cheikhna explained their meaning. I pointed out gas stations and described other landmarks in the urban landscape that might be useful to guide our way. As we passed by a street vendor selling cigarettes and phone cards, I nudged Cheikhna forward to ask him for guidance because I was still not very adept in Hassaniyya. The man offered directions with a series of hand gestures. I stepped forward towards the man, pointed out Cheikhna's blindness, and reminded him that he

cannot understand hand motions. He then offered a shoddy verbal description of the pathway in thick Hassaniyya that was far beyond my level of comprehension. Cheikhna and I thanked the man and walked away. We discussed the event by piecing together my observations of the man's hand gestures and his interpretation of the man's verbal instructions to figure out where we should head. Cheikhna found this collaboration—between a foreigner and a blind person— amusing. On this occasion, he shared an Arabic proverb: "*The stranger is blind, even if he is sighted.*"

The proverb encapsulates a central theme of this ethnographic work. It traces the connections between estrangement, blindness, and sight. Rather than consider how sight could dominate in the world of the blind, this proverb instead considers how blindness emerges in the encounter with an alternative world. It connects the notion of estrangement with blindness and highlights how blindness is rooted in social experience.

Over the course of this ethnography, we have learned how blindness is not an absolute absence of sight but is better described as a partial and situated sight. In the anecdote above, the stranger possessed a partial sight, and the blind possessed a partial sight. Through collaboration, the two parties find guidance to their destination. Likewise, the proverb alludes to this sense of partial sightedness. Although the stranger may be sighted in one sense, estrangement leads to blindness in another sense. Likewise, although the blind is certainly blind in one sense, familiarity, intimacy, and belonging provide sight in another sense.

Ethnographers are well aware of how the strange outsider position or point-of-view generates a differential attention to local worlds. Webb Keane identifies the dialectic between estrangement and intimacy as the basic enduring quality of the epistemological unconscious of cultural anthropology (2003). He notes that where an epistemology of intimacy attends to the

particular and the locally relevant terms for self-interpretation and for understanding the meaning of social action, an epistemology of estrangement produces ethnographic knowledge about how local meanings are objectified and circulated in public (Ibid.).

Unlike Nunez, whose encounters in the country of the blind led him to reaffirm the primacy of his own vision, my experiences in Dali Gimba often invoked a process of selfestrangement that made me question my own sense of sightedness and assumptions about the senses and perception of the world. Immersion not only helped me understand local experiences of blindness, but it brought into relief the various ways in which my own sight was partial and inundated with forms of blindness. In Chapter Four, I explored how the social and material qualities of the bādiya landscape produced a sensorium that delimited the usability of vision and displaced the integrity and primacy of sightedness. In Chapter Five, I discussed how blindness shaped alternative sensory attunements that allowed people to attend to a shared world in different ways, and to tap into sensory worlds that lay beyond ordinary and habitual kinds of sensibility. Various chapters have offered accounts of encounters with invisible and Unseen forces that other humans and non-humans had the ability to perceive, thus highlighting various ways in which my own sightedness was limited, partial, and relational.

The encounter with blindness also led me to see sight afresh. Michalko writes that "[w]hat is [so] cool about blindness" is that the encounter between sight and blind subjectivity produces the occasion for sight to realize its own constructed subjectivity. As he poetically describes,

When sight "looks blindness in the eye" it does not see its opposite, it sees itself. Blindness reflects sight and it shows sight to itself, something it cannot see without blindness. Blindness time, our time, is the time for sight, for normalcy, to develop selfunderstanding...and this is fucking cool. (2010)

Shifting Vistas

This engagement changed how I saw and what I noticed. Interactions with blind interlocutors opened my eyes to the multi-sensory qualities of social interactions and environments. Living and learning with a professional water diviner made me pay attention to the critical role of water and wells in social life.

What first drew my attention to this study was the discovery of the rich history of blindness in the Islamic world, at al-Azhar and in Arabic literature. The discovery made me wonder how Islam or cultural elements of Arabic-speaking societies might have accommodated such inclusive traditions.¹⁷¹ Over the course of producing this ethnography, what I discovered instead was an account of how a group of blind people understood themselves and how they established themselves as a community through narratives that articulated a unique connection to Islamic tradition.

One important revelation that has emerged across various themes explored in this ethnography is the appearance of abundance in things that are often characterized by the quality of lack. I learned to see the abundance in blindness, in the possibilities of sensorially engaging with the world, and in the potential to think about perception and knowledge in the world. I also learned to see the abundance contained within the Sahara, a regional space that is often defined by conditions of lack and death, by following practices of water divination, which draws upon the hidden abundance of groundwater locked beneath the earth.

¹⁷¹ Alternative paths of discovery could have instead drawn upon the African background of such traditions.

Intimacy and Conjunction

In many ways, this research project felt perfect for the field of anthropology. In the end, I have constructed a monograph with all the elements of a stereotypical ethnographic study. It presents a village study that considers a fieldsite that is commonly imagined as being "remote," across a variety of geographic scales. It is interested in alternative "ways of seeing," hearkens back to enduring motifs that define the discipline, and engages with familiar subjects such as orality, myth, kinship structures, divination. It examines domains of everyday life, ritual, and communication. This nexus of research also taps into discussions of religion, reflexivity, genomics, personhood, the senses, the environment, and disability.

Near the end of my time in Dali Gimba, I reflected on my journey and felt grateful for the opportunity to conduct such a study. I was thankful to Muhammad Mahmud and his family for unhesitatingly taking in members of my family and me, and for hosting us so generously for our lengthy visits over the years. Their exercise of generosity (*karam*) provided me with yet another tangible manifestation of the Ummārī karāma.

Behind the gratitude, however, I also felt guilt. As if I had taken advantage of the unique story of the Ummar for my own personal benefit. It felt easy to excite grant agencies and fellowship committees about the potentials of my work due to the ethnographic allure of Dali Gimba and its unique theoretical nexus. The story of Dali Gimba and my research there is immensely intriguing to nearly anyone with whom I talk about it. This easy fascination has inevitably crossed over into my own identity and become an undeniable source of social capital in my life. I decided to share these feelings with Muhammad Mahmud. I shared all this background and told him, "Bibby— I feel like I have taken advantage of your karāma."

He responded, "*Ya Ali*! This karāma is from Allah. Just like you did not choose it for yourself, so too did I not choose it for myself—*It is from Allah. Indeed, Allah provides for whom He wills without account.*"¹⁷²

I too was a recipient of this karāma? With this statement, Muhammad Mahmud articulated a point of conjunction where karāma transformed from being an object to consider with a depersonalized gaze to being an embodied reality. This too expanded my understanding of *karāma*. It was not just a local concept Ummārīs used for self-interpretation and crafting their own narrative. It was a dynamic and relational category as well.

Like many other ethnographers, I went to my field site intending to map out kin relationships and local discourses only to find myself being grafted into those very networks and involved in local domains of action and production.¹⁷³ Various aspects of my identity, such as being male, Muslim, brown, or being married were critical to the position I was able to assume, and the trust and rapport that I was able to build, especially in the wake of the genomic research project that heightened the level of distrust in the village for researchers.

Looking Forward

In his classic article on "Remote Areas," British social anthropologist Edwin Ardener makes the astute and perhaps counterintuitive argument that "remote" areas are characterized by a distinct quality of "event-richness."¹⁷⁴ He offers two paradoxical observations. On one hand,

Remote areas are full of innovators. Anyone in a remote area feels free to innovate. There is always a new pier being planned, and always some novelty marking or marring the scene. [...] We are always seeing the end of some old order. (2012, 527-528)

¹⁷³ This phenomenon of mixing genealogies is most clearly articulated in an honorific exchange of our names: Salmah and I named our third child, "Muhammad Mahmud," and Cheikhna and Naïsha named their first child, "Selma."

¹⁷² These words are drawn from Qur'anic verse (3:37).

¹⁷⁴ Ardener distinguishes remote areas from places that are spatially distant, or geographically peripheral; specifically, he associates remoteness with peripheries that are seen to be *improperly* linked to the dominant zone (2012).

At the same time, he remarks:

Remote areas are full of ruins of the past. The corollary of the above is that the remains of failed innovations, and of dead economic periods, scatter the landscape. There is another paradox here: that remote areas cry out for development, but they are the continuous victims of visions of development. (Ibid., 528)

Ardener's observations here powerfully capture the dynamic, event-dense, and transformative quality of life in Dali Gimba.

For most of my time living there, between 2017 and 2019, construction for the major Ataya development project was underway in a location just a kilometer away from the village. Migrant workers from Nouakchott and Mali and truckloads of materials were constantly flowing into the new region. The project was stifled by corruption and mismanagement. By the time I left in 2019, construction had been halted on the project for almost a year, workers were owed months of backpay and villagers had little faith that the project would come to fruition.

By the time I returned for my final short visit in 2021, the project was complete. Princess Shamsa bint Hamdan travelled to the village herself to inaugurate the development, and soon afterwards, everyone had moved from Dali Gimba and settled into forty new houses in the new development. The village where I had done my fieldwork—the village that Muhammad Mahmud established as a home for the Ummār in the early 1980s, was now an empty ruin. Empty cement blocks lay where former mbārs used to stand. Dārs too remained, either locked as storage or abandoned. In the coming years, it is certain that the observations and descriptions of everyday life presented in this work will become increasingly outmoded. New cell phone towers promise to bring more cell phone and internet connectivity. Artificial lighting and television are inevitable. Muhammad Mahmud has died, but his family is adjusting and adapting to his substantial absence.

Coda

There is no one profound lesson to be shared about blindness. It is an endless treasure trove of contemplation. It is a crucial metaphor that we live by and a recurring subject of interest in literature, religion, philosophy, and studies of perception. Its conceptual power derives from its fundamental ambiguousness and the indeterminacy of sensory experience. Perception fundamentally draws upon the senses, but also from forms of intuition, imagination, inspiration, and divination that appear to be inseparable. Blindness is at once a symbolic construction and a lived experience that exists in bodies. These two ends are divergent, but also inextricably linked and irreducible. Blindness appears to be shaped and delimited by visual culture, society, and hierarchy of the senses. At the same time, blindness contains the subversive potential to challenge cultural expectations and social arrangements. Moreover, blindness is only partially blind. It is also partially sighted. Much like sightedness, which also comes with its blind spots and partiality. In some ways the blind cannot see, while in other ways they can see.

They find different ways of attuning to the environment and learn to tap into alternative sensory worlds. Blindness does not cease to be a source of wonder and curiosity even when it is not "dramatically immersed" in a world of sightedness. In Dali Gimba, residents are constantly trying to figure out each other's sensory attunements and they critically reflect upon their own. Blindness provides a mirror for sight to see itself and will remain an important concept of inquiry as long as sight remains. The International Agency for the Prevention of Blindness attests that "good vision unlocks human potential" (IAPB n.d.). The story of Dali Gimba teaches us that good blindness, too, has the capacity to unlock human potential.

In 2023, I received a phone call from Cheikhna. He called to inform me that he had just performed his first water divination for a client near Nouadhibou.¹⁷⁵ Muhammad Mahmud has died, but the karāma of the Ummār lives on.

¹⁷⁵ To note, Cheikhna's practice of water divination diverges from the models and interpretations of karāma presented in this work. He was not born with the capacity, nor did he learn it from his father. He had only memorized a few chapters of the Qur'an and was not from the "people of the Qur'an," by any means. Moreover, he was not forty years old, which he himself described as the reason why his father did not practice water divination until the 1970s. All of these contradictory features show the dynamic nature of ideas such as karāma, which are constantly being reinterpreted by people.

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