Shifting Sands

ALSO BY JUDITH SCHEELE

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A HUMAN HISTORY
OF THE SAHARA

Shifting Sands

Judith Scheele

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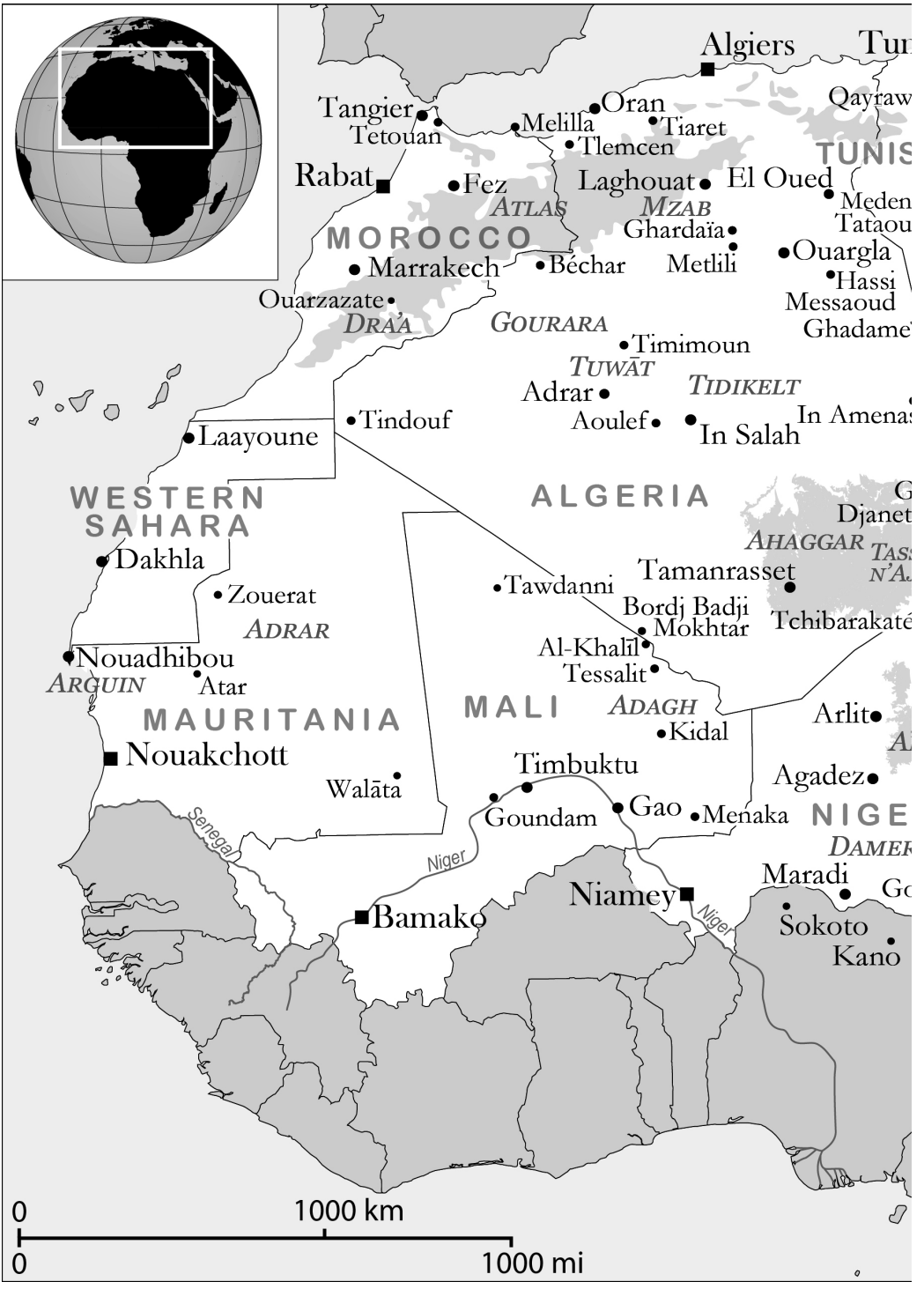
To Matou and her family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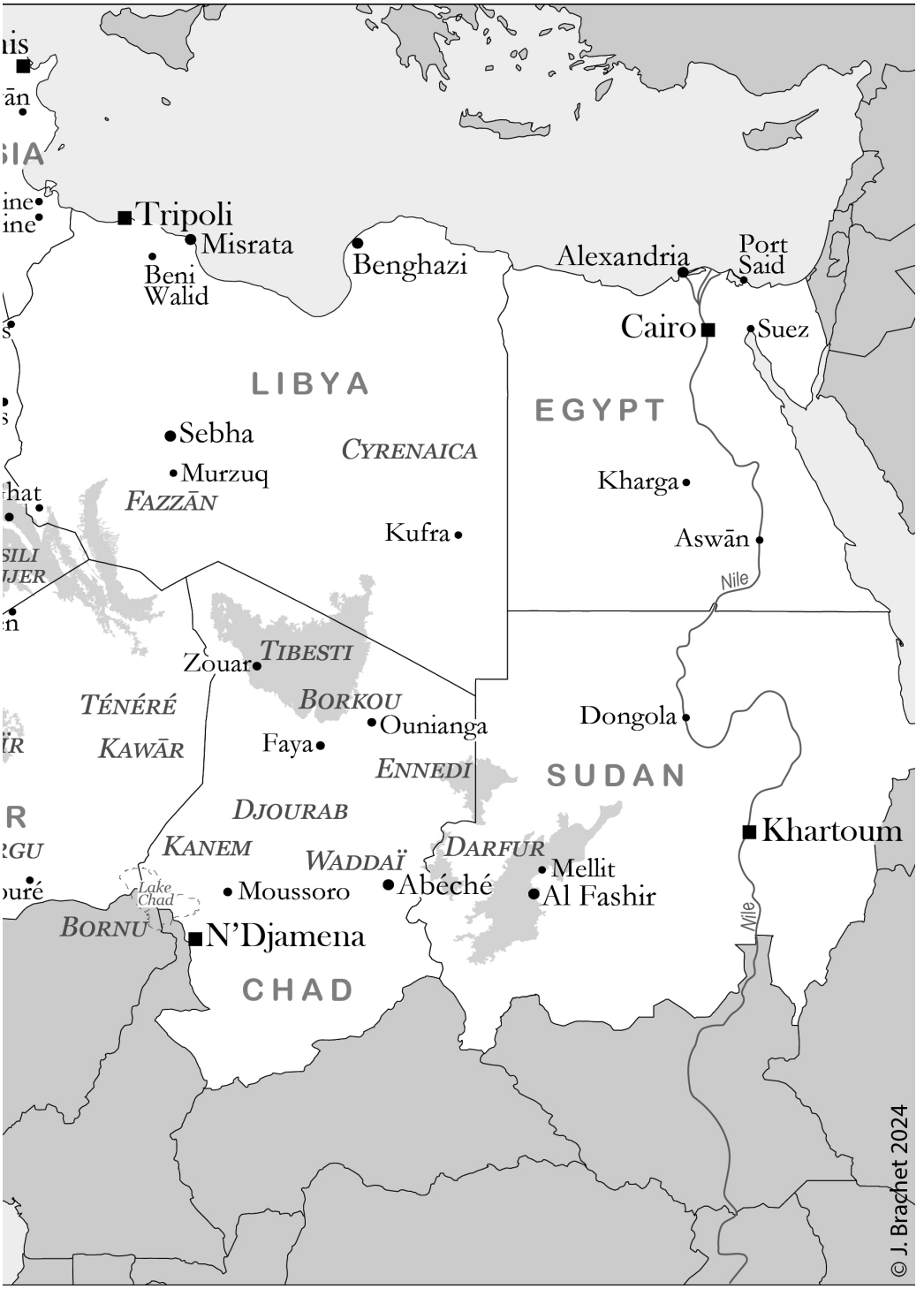
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INTRODUCTION

DESERT LORE

I love all waste
And solitary places; where we taste
The pleasure of believing what we see
Is boundless, as we wish our souls to be.
Percy Bysshe Shelley, *Julian and Maddalo: A Conversation*, 1818–19

If you want to travel overland from the Chadian capital, N'Djamena, to Faya, the main town of the northern Chadian Sahara, you will probably, after some searching, find yourself directed to the 'Parc Faya'. When you get there, you will discover an unmarked, mud-walled courtyard in a peripheral part of town. The only sign that this is a crucial transport hub for everyone desirous of travelling to the Chadian Sahara are a few dusty boxes of Libyan biscuits piled in a corner alongside two tired-looking four-by-fours, clearly not in a state to go anywhere any time soon. Outside, the broad, unpaved streets are animated, with street sellers hawking fresh peanuts, cooked food and paper tissues, but here, everybody is more quietly occupied, waiting. Passengers shelter under the makeshift mud-brick awnings that line the edges of the courtyard; although the hot season has long passed, the heat is overwhelming, the air heavy with the smell of kerosene and gas. Lizards do their interminable push-ups on the

walls; flies settle on dusty bundles of luggage or inspect leftover food wrappers.

At night people find a quiet corner to roll out their mats, mumble a prayer and sleep lightly. Transport – in the shape of a battered four-by-four pickup truck or a desert-going freight truck – may show up at any time, perhaps in the very early hours of the morning, and only the first on board will be able to depart. Faya is a difficult place to reach – unless, that is, you have your own jeep and know the way through the dusty plain of the Bahr al-Ghazāl and the shifting sand-dunes of the Djourab that stretch for hundreds of kilometres between N'Djamena and Chad's extreme north, or if you have privileged connections to the army and can hitch a lift. Otherwise, your only option is to wait. There are no regular services, but private drivers often stop by to take on some additional load or a few paying passengers. The thousand-kilometre journey, all but the first 80 of which is off-road, can take anything from forty-eight hours to six days, with hardly any settlements or provisions available on the way.

On my first trip, two Toyota pickups finally appeared on day three to take us at least as far as Moussoro, 300 kilometres north of N'Djamena, where the Sahelian drylands gradually turn into the Sahara proper. Their drivers assured us that it would be easy to find onward transport from there. And they were right: Moussoro had just been the scene of an important demobilisation campaign of the Chadian army and security forces, presided over by the late Chadian president Idriss Déby himself. As many Chadian soldiers are recruited in the north, demand for northbound travel was high. I found a spot on the back of a battered and unreliable-looking jeep with about twenty of them, returning after decades of service to a 'home' they barely knew. They were all past their first youth and bore visible traces of former fighting: scarred faces, missing fingers, a limp. They

all still wore the khaki turban, sign of their military status, and most had not surrendered their weapons. When the bumps on the road jolted us together, I could feel shotguns hidden under boubous, revolver butts in my back, in addition to the knives that are part of the normal outfit in much of northern Chad.

The jeep quickly proved itself as unreliable as it looked. Day after day, either stuck in the sand without any equipment to dig us out or waiting for the engine to cool down, we grew hungry, tired, irritable. The monotony of the landscape – first sand-dunes, then the endless flat, dried mud of the Bodélé Depression, dotted with an occasional tent made from woven mats as grey as its surroundings – did little to alleviate the growing tension. On day five, all twenty-odd of us finally abandoned the vehicle and its driver 30 or 40 kilometres outside Faya and finished the journey on the back of a freight truck. Two hours later, the town came into view at the bottom of a vast sandy depression: greyish bushy date palms as far as the eye could see, crumbling mud-brick houses, rubbish heaps, an impromptu market, scavenging goats, wrecks of Libyan tanks, all blurred by the dust. Men in patchwork uniforms met the truck and its passengers, staring at our passports upside down and barking out orders without visible effect. My fellow travellers quietly disappeared. They hardly stood out in a town that looked like a ruined garrison anyway.

I was to stay in Faya for over a year in order to write a book about the town's history and contemporary life. With time, the oasis would gradually reveal its hidden beauty to me. I would learn to ignore the presence of armed men everywhere, to take them for granted – as everybody else seemed to do – and recognise them for who they were, regardless of their dilapidated uniforms: brothers, cousins, uncles to my new female friends; talented storytellers; passionate card players; loving parents.

Still, this first trip stayed engraved in my memory, if only for the striking contrast it presented with the Sahara of the popular imagination: the Sahara here was a flat, brown place with no elegant golden sand-dunes in view, criss-crossed by ageing broken-down jeeps rather than camel caravans, inhabited by disgruntled soldiers rather than mysterious veiled men behind their camels, and with no carefully tended slender palm trees swaying in the breeze. Yet it held much more truth, interest and depth than age-old external fantasies about the region.

Deserts are central to the Western imagination. Moses, Jesus and Muhammad all went to the desert in their search for truth. Countless American hippies in the 1960s and 1970s followed their lead. *Star Wars* battles were filmed in the Tunisian Sahara; blockbusters from *Lawrence of Arabia* to *Game of Thrones* were staged in the Moroccan south. Novelists from Gide to Bowles sent their protagonists to the desert to experience both boundless pleasure and unspeakable desolation. This is where Saint-Exupéry met the Little Prince and the English Patient came to grief; where, today, high-tech Euro-American imperialism falters in the face of the sheer determination of mysterious veiled men in plastic slippers. And of all the deserts in the world – from the Gobi to Arizona, Antarctica to Siberia – the Sahara, the world's largest hot desert, just an easy flight away from Europe, is the one that many people around the globe most readily think of: it is the Desert as such. Other deserts might approximate the Sahara – might be even hotter or more extreme – but they are never quite the real thing.

Easy as it may be to summon up ready-made images of the region, these fantasies make it difficult to discern the Sahara and the people who call it their home. 'Timbuktu' in English parlance stands for the end of the world, as does 'Tataouine'

in French; their real existence may be doubted and in any case matters little. The Sahara 'guards its mystery', as tourist brochures readily assert, and this mystery participates in its appeal. But ignorance, like knowledge, is never just given but socially constructed. In European and arguably also in much Middle Eastern thought, the Sahara has long acted as the convenient antithesis of civilisation, as a canvas onto which to project fears and desires, without too much interruption by unruly fact.

The contemporary Sahara, meanwhile, is depicted mainly as a site of tragedy inhabited by nameless (and usually numberless) victims of humanitarian catastrophes or natural disasters. If the media carry any stories about the region, they are about civil war in Algeria and Libya; genocide and slavery in Sudan; military putsches in Burkina Faso, Chad and Mauritania; Islamist bombings in Morocco; refugees in Western Sahara; kidnappings and beheadings in Tunisia; revolution in Egypt; drought, famine and rebellion in Niger; or Islamist upheavals and foreign military intervention in Mali. Behind these barely sketched-out states and their intractable problems lurk more familiar 'global' threats: desertification, terrorism, 'waves' of clandestine trans-Saharan migrants and 'climate change refugees', all set against the unpleasant background of extreme poverty. The Sahara covers parts of eleven countries, four of which are counted among the poorest in the world, while at least six others make Western headlines mostly as theatres of endemic conflict and warfare.

The Sahara is thus a place not only of fascination with purity but also of obsession with danger, a place whose 'emptiness' is all too readily filled with the nightmares of contemporary imaginations. Of course, one cannot blame the media for favouring the spectacular – and many parts of the Sahara have indeed been shaken by a series of political, social and ecological crises. Yet

clearly this is not all that can be said about the region, with its almost 8.3 million square kilometres (3.2 million square miles), almost one-third of the African continent, several million inhabitants, and a corresponding variety of languages, cultures, societies, livelihoods, settlement patterns, human ecologies, sophisticated agriculture, complex transport systems, and striking capacity to innovate. This book is about that other Sahara: not the 'wastes' of the romantic imagination nor the flattened terrors of news bulletins but the highly differentiated space in which Saharan peoples and, increasingly, incomers from other parts of Africa live, work and move.

Saharan Journeys

My own engagement with the region goes back for more than twenty years, first as a visitor, then as a trained social anthropologist, carrying out research with traders, migrants, pastoralists and agriculturalists in southern Algeria, northern Mali, and northern Chad. Much like my first trip to Faya, these twenty years have been a gradual process of unlearning all the things I thought I knew, about the Sahara itself but also about the world beyond it. The Sahara, its people, its history, even its geography, is hidden behind a jungle of preconceptions that have developed over the last two millennia. These preconceptions have changed over time, leaving behind sedimented layers of unspoken assumptions. While this book is primarily concerned with the Sahara as seen from the inside out, we must begin this process of unlearning by shaking down our assumptions and holding them up to the light in order to be able to discard them where necessary.

Two closely related and mutually constitutive strands of thought guide these assumptions. On the one hand are perceptions of the geographical area that we call the Sahara, at

the crossroads of the Mediterranean, the Middle East and sub-Saharan Africa. These perceptions continue to be informed by a particular form of orientalism, a strong imperial legacy, Europe's and the USA's conflictual and largely hostile relationship with Islam, state-centred constructions of mobility as a problem and racial assumptions about 'white' and 'Black' Africa, about who belongs where.

On the other is the notion of the desert itself, with its many near-synonyms, such as *wasteland*, *wilderness*, *badlands*; words that can be used for places that are highly exotic or else close to home and that have great metaphorical power. The great deserts of today – the Sahara, the Arabian deserts, the Kalahari, the Gobi – have all been pretty much in place for the last 65 million years, with periodic climatic variations. This means that the great literate traditions of the old world all developed in close proximity to deserts. Deserts play an important rhetorical part in these traditions as places of retreat and purity, of truth and the absence of worldly distraction, yet also as places of perdition, fear and temptation. Both the devil and God dwell in the desert, and, blinded by the desert's mirages, it is not always easy to figure out who is who.

Around 1375, Prince Joan of Aragon offered Charles VI of France a precious gift: six richly illuminated vellum leaves bearing a map of the known world, centred on Jerusalem, probably drawn by the Majorcan Jewish cartographer Abraham Cresques. This document, kept at the French National Library and known as the Catalan Atlas, not only is a masterpiece of medieval map-making but also contains what is probably the first visual depiction of the Sahara by a European author. Cresques' Sahara is a busy place, peopled by veiled men on camels, military tents, slave merchants and, most prominently, a seated Black man wearing

a crown with a staff decorated with a fleur-de-lis, holding a golden nugget the size of an apple. The gilt of crown and orb still shimmers from the page 650 years later. This is Mansa Musa, the fourteenth-century king of the Mali empire, whom contemporary historians have dubbed the richest man in history.

Cresques' map was highly original. It drew on two cartographic traditions popular at that time: a mappa mundi, a depiction of the world as represented in scripture, and a portolan, a coastal guide for navigators based on their direct experience. The attempt to combine those two forms led Cresques to adopt a vertical aerial perspective, a perspective that, before the times of air travel or aerial photography (which was developed in the 1850s), was largely a feat of the imagination and advanced mathematics. One earlier map had adopted the same perspective and featured the Sahara: it appeared in the *Tabula Rogeriana*, an atlas commissioned by the Norman king Roger II of Sicily in 1138 and completed by the Moroccan-born and Andalusian-trained cartographer al-Idrīsī in 1154. In it, however, the Sahara beyond the Atlas Mountains hardly figured.

For the most part, neither Arab geographers nor Saharans themselves imagined the space they traversed or inhabited in this way. The earliest accounts of the Sahara are not abstract drawings but concrete narratives of travel, or itineraries. In the fifth century BCE, Herodotus famously described the Sahara along a straight line leading from the Nile to the Niger Bend, with 'peoples' spaced at a convenient distance of ten days' travel from one to the other. Arab travellers from Ibn Hawqal in the tenth century to Ibn Battūta in the fourteenth similarly described trade routes, with much practical attention to how to get from one place to another; they were almost exclusively interested in supply points and 'civilisation' on the road, not in the 'unheeded Berbers' whom they dimly perceived as living in

the vast spaces beyond their own itineraries. Al-Idrīsī himself accompanied his maps with lengthy texts that adopted the classic format of Arab travelogues, enlivened with anecdotes gathered from Arab tradesmen whom he had met on the North African coast, showing that he considered an aerial perspective a poor substitute for travel narratives.

What, then, happened when Cresques and geographers after him adopted a different perspective? The most obvious result was that the Sahara started to look empty, as spaces that quite simply had not figured in itineraries – because the external travellers who wrote travelogues were discouraged from going there or because nobody wanted to go there anyway – suddenly had to appear on the map. Cresques' solution to this was simple: he filled all available gaps with large images illustrating principally European commercial interests, adding a few written anecdotes taken from Marco Polo's thirteenth-century *Book of the Marvels of the World*, and made them large enough to fill all the available space. This practice, however, quickly fell out of fashion, and by the nineteenth century, colonial maps of the Sahara mostly showed nothing at all apart from a scattering of mountains and largely imaginary lines along which, supposedly, travel was conducted. The idea of the Sahara as an essentially empty space had found its perfect visual expression.

While itineraries are uncompressible – each day of travel has to be accounted for – an aerial perspective permits manipulations of scale. Where the Sahara is concerned, this usually means zooming out. Enormous as the Sahara is, maps often reduce it to a smallish and rather uniform smudge, with most relevant physical features left out. (This is the equivalent of producing maps stretching from Galway to Novosibirsk, Portugal to Turkmenistan, or New York to San Francisco with no mention of, say,

the Alps or the Rocky Mountains.) On these maps, the Sahara usually appears in a unified shade of light brown, suggesting a region that is empty, barren, and everywhere the same. Oases rarely figure, and features that are crucial to local populations – salt mines, good pastures, perennial water sources – quite literally drop out of the picture. National borders are often left out or criss-crossed by many-coloured arrows pointing in all directions, suggesting porosity and frictionless connectivity over vast distances. This is not an image that can help us understand how people live in either the contemporary or the historical Sahara, nor how they understand their own position within it. Our first job, then, is to complicate this representation by adding nuance and heterogeneity.

Often, such general maps also convey a particular sense of time. Take, for instance, standard maps claiming to represent 'trans-Saharan trade' from, say, the seventh to the nineteenth century on a single map, with routes that seem to be fixed features of the landscape. Imagine just for a second anybody trying to do the same for even a small corner of Europe or North America on the basis, perhaps, of the continuity of Roman or colonial trade roads. This not only misrepresents actual movement on the ground – as we will see, the logistics of camel caravans and the vagaries of Saharan pasture make the very notion of a 'trans-Saharan route' an oxymoron – but also somehow implies that the Sahara is timeless, that nothing ever changes, and that both its environment and its people are situated beyond history (at least until the arrival of Europeans and their imperial armies in the nineteenth century).

A contemporary offshoot of this vision can be found in military and strategic maps, which also tend to adopt a vertical aerial perspective on a continental scale. In 2004, US Lieutenant General Wallace C. Gregson Jr described the Sahara – in

a particularly badly chosen metaphor – as a 'swamp of terror', concluding with the ominous warning that 'trouble comes from ungoverned places'.[1] This was the beginning of what the anthropologist Jeremy Keenan has called the 'banana theory of terrorism'.[2] Take a moment to look at a world map: if you zoom out enough, it is easy to trace the banana-like arc of 'ungoverned places' stretching from Afghanistan via Syria, Iraq and Somalia across the Sahara to Mali and Mauritania. All places Western audiences have heard of, usually in conjunction with state failure, ongoing civil war, ominous terrorist threats, rampant poverty and destruction. Add a few arrows stretching from Afghanistan to Western Sahara, and the banana indeed begins to look threateningly large, spanning, as it does, half of the globe and bringing the 'terrorist hotbeds' of Central Asia into uncomfortable proximity with Euro-America. This is, of course, primarily an illusion of scale; if you zoom in, it quickly becomes apparent that the overland journey from Afghanistan to Mali is a long and arduous one, hardly suitable for jihadi (or any other kind of) mass terrorism. But these images are powerful political statements in their own right, creating fear and a perceived need for intervention.

The Sahara: Bridge, Barrier, or Laboratory of World History?

Beyond General Gregson's 'swamp of terror', the Sahara has long been spoken about through a series of metaphors specific to the region: as an inland sea, as a bridge, as a buffer zone, as a barrier that cuts the African continent in half. This language suggests an unsurmountable civilisational frontier supposed to have isolated *sub-Saharan* Africa from the rest of the world for most of history. Contemporary borders, and the concentration of the

region's major cities and densest populations to the north and the south of the desert, tend to support this view; even North Africans sometimes forget that they are as African as their sub-Saharan neighbours.

Although French colonial distinctions between 'white' and 'Black Africa' have fortunately been relegated to the rubbish bins of history (or have they?), their underlying (racial) assumptions often persist. In everyday perception, North Africa continues to be seen as an accidental appendage of the continent and its resident 'Arabs' as never quite African enough – although North Africans account for roughly 18 per cent of the overall population of the African continent and Arabic is spoken throughout much of Islamic Africa. This classification turns the sizeable Black population of North African countries (estimated to be 15 to 20 per cent of these countries' overall population) into strangers in their own lands and simply erases Black Saharans – arguably the majority of the overall Saharan population – from the picture, without even mentioning all those whose lives defy simplistic classification along these lines.

Another view, popular in global economic history, suggests that the Sahara has never constituted a serious obstacle to cross-regional interaction but rather has furthered it, that it has been less a barrier than a bridge in African history. This view is a clear improvement on the first, if only because it accounts for long-standing histories of commercial and religious exchange and works against all-too-well-entrenched colonial stereotypes of Africa as a continent outside history. Yet seeing the Sahara as a bridge assumes that its primary purpose is to be *crossed*; historical agency is attributed primarily to non-Saharan travellers brave enough to face desert hardship. This view is responsible for the all-too-familiar images of light-skinned North African traders leading camel caravans in a straight line across the otherwise

empty space of the Sahara, facing incredible hardships caused by a hostile environment and uncouth desert raiders, about whom nothing more is said. It has also led to attempts to understand 'trans-Saharan trade' uniquely in terms of demand and supply on the Mediterranean coast, which carries into contemporary analyses of 'trans-Saharan smuggling' of guns, drugs or people. Beyond a few road cutters and raiders, Saharans rarely feature in these accounts.

This image of Saharan emptiness and passivity has deep roots in the historical record. Classical authors such as Herodotus and Pliny knew of the Sahara from distant hearsay only, whereas Arab travellers, versed in the same literary traditions, were able to add information gleaned from interviews with traders or even from their own personal experience. Although it is not always easy to parse fact from fiction or empirical information from literary convention in these accounts, it is clear that the Sahara was anything but empty when these writers began to describe the region from the tenth century onwards. Arab travellers were impressed – often grudgingly so – by the bustling cosmopolitan cities and high levels of Islamic scholarship they encountered on their journeys.

And yet, blinded by their own cultural and racial prejudice, they mostly attributed these qualities to the beneficial influence of fellow Middle Eastern and North African travellers and merchants, with whom they tended to lodge and interact. In the tenth century, the Arab traveller Ibn Hawqal described Saharan pastoralists as 'tribes of unheeded Berbers who are unacquainted with cereals and have never seen wheat or barley or any other kind of grain. They are for the most part in a state of wretchedness and their dress is a piece of cloth worn sash-wise.' For his near contemporary al-Istakhrī, these people were

quite simply 'isolated Berbers who have never seen a settlement and know nothing other than the remote desert'. Four centuries later, Ibn Battūta met them, too, as they held up his caravan, to his outrage, in the middle of the holy month of Ramadan.

For all those writers, the contrast with Arab trading towns couldn't have been greater. According to Ibn Hawqal, Sijilmāsa, in southern Morocco, was inhabited by people from 'Irāq, and merchants from Basra and Kūfa, and the men from Baghdād ... They, their children, and their trade flourish.' The impression he gives is one of a hardy Arab diaspora in an otherwise empty or savage land, reproducing itself independently and somewhat miraculously. He makes no mention of the many others involved in these Arabs' lives – the cooks; the servants; the guides; the providers of camels, food, transport, lodgings – or of the local wives who presumably made it possible for the 'Irāqī' merchants to have children in the first place. In the eleventh century, al-Bakrī similarly notes that 'most of the inhabitants of Awdaghust [in what is now Mauritania] are native of Ifrīqiyya [present-day Tunisia]'. He, however, does mention local 'Black women', although hardly in flattering terms: 'Black women', he says, are excellent cooks, who are sold at 100 *mithqāl* per head alongside 'pretty slave girls with white complexions'.[3]

One of the first North African writers who broke with this tradition and attempted to understand the inhabitants of the Sahara on their own terms was Abraham Cresques' contemporary, the North African polymath Ibn Khaldūn. Abū Zayd 'Abd al-Rahman b. Muhammad b. Khaldūn was born in Tunis in 1332. A man of letters deeply involved in local politics, he spent his life moving between the capitals of the Maghreb, with occasional stints in prison, personally witnessing the fragility of all forms of political power and the rise and fall of kingdoms and princes (in

which he often had a hand). Several times in his life, at moments of crisis, he sought refuge in the Sahara under the protection of Arabic-speaking nomadic tribes.

For Ibn Khaldūn, the history of the world was a cyclical confrontation between *badū* and urbanites. The Arabic word 'badū' has since given us the English 'Bedouin', but for Ibn Khaldūn, the term encompassed all inhabitants of the *bādiya*, or wilderness, whether they were nomadic, sedentary or somewhere in between, and whether they spoke Arabic, Berber or any other Saharan language. According to Ibn Khaldūn, what made the badū different from city dwellers was not so much their lifestyle as the hardships of rural life, which were caused by the harshness of the environment and the absence of protection granted by a prince. This welded the badū together through strong ties of solidarity born from the need for mutual protection. States, meanwhile, purposefully encouraged meanness, strife and cowardice among their citizens, for how would the latter otherwise have consented to paying taxes?

The bādiya is thus close to the European idea of a fundamentally anarchic 'state of nature', with the difference that it was seen not as a state prior to policed society but as the latter's constant structural counterpart that kept kingdoms and empires on their toes. Additionally, the badū had none of the innocence that European philosophers such as Rousseau would later ascribe to the inhabitants of the state of nature; they were politically quite as sophisticated as city dwellers, just much tougher. This was why, Ibn Khaldūn wrote, the badū usually won their battles against city dwellers, taking over kingdoms and creating far-flung empires. Once victorious, however, they were then themselves corrupted by the luxuries of city life. They grew lax and weak, their quarrels petty, until, after a few generations, they were replaced by new groups of badū.[4]

During the period in which Ibn Khaldūn penned his universal theory of history, he had once more sought refuge in the bādiya himself, at the fortress of Beni Salama near Tiaret in contemporary Algeria. The fortress still stands, commanding stunning views over the pre-desert. From his window, Ibn Khaldūn could observe each summer the arrival of thousands of sheep, goats and camels, still covered in Saharan dust, flooding the plains in an unstoppable flow of moving bodies come to graze on the post-harvest stubble; it is clear from his autobiography that he spent many a pleasant moment in the shelter of their nomadic owners' tents.

Ibn Khaldūn's notion of life in the bādiya, then, was not purely theoretical; although he was a born-and-bred urbanite, he had felt, smelled and tasted the world beyond the cities, suffered from its hardships and perhaps experienced it as a form of liberation from the artificially restricted horizons of courtly life. Although historical reality in the Sahara was often more complicated than his theories allowed for (the badū did not always win, nor was the distinction between badū and city dweller always straightforward), to date he is the only thinker of some international renown to have developed a political theory rooted in Saharan history, attempting to account for it on its own terms.

Narratives of Desertification

For classical, medieval and early-modern writers, deserts were simply part of the world as God had made it. This attitude changed beginning in the sixteenth century as Europeans set out to conquer the world and to absorb its natural bounty into capitalism, spreading natural disaster in their wake. In the seventeenth century, geographers and botanists observed the destruction of much of the native flora on tropical islands such

as St Helena and Mauritius first-hand. By the mid-eighteenth century, they had reached the conclusion that the global environment was responsive to human degradation and that destruction might be irreversible. This was a clear break with the past, when nature had been understood to be basically unchangeable and thus inexhaustible. 'Destruction' for many of the thinkers in this period was equivalent to deforestation, a process that many had witnessed first-hand in the eighteenth century as native forests across the Americas were cut and burned down on an extraordinary scale, in fires that could last for weeks, leaving havoc in their wake. The aim was to sell timber and to clear the land for colonial agriculture, but the result was often nothing but a charred and ruined landscape prone to erosion.

If, eighteenth-century botanists mused, deforestation could cause land degradation on this scale, it stood to reason that deserts everywhere were not natural occurrences but the result of mismanagement. These colonial reflections were paralleled, in Europe itself, by the gradual enclosure of European 'wastelands'. Heaths, moors, forests, scrubs and downs, which had previously been held in common, were redefined as unproductive land, fenced in, and turned into private property, in the process unmooring a good share of the poor who had relied on them for daily survival. One of the justifications for enclosures was that open access to these wastes encouraged 'slothful and wandering habits' among the poor. The term 'wastelands' gradually accrued negative connotations, becoming 'land wasted' as well as 'land for the wasteful'. It's no coincidence that the word's Latin root *vastus*, unoccupied or uncultivated, has given us both 'vastness' and 'devastation'.

Imperial and domestic reflections went hand in hand. It was a short step from the assumption that deserts were the result of deforestation to the idea that, with careful management, they

could be rendered fertile again. George-Louis Leclerc, Comte de Buffon, claimed in 1778 that 'a single forest' planted at the heart of the Arabian desert could attract enough rain to render the whole area fertile.[5] Thirty years later, the early socialist visionary Charles Fourier made similar observations about the Sahara itself.[6] From the eighteenth century onwards, in European literature, deserts were no longer perceived as natural counterparts of civilisation, or its necessary cyclical corrective; rather, they were viewed as civilisation's failure. Similarly, the people who inhabited both deserts and other kinds of wastelands – whether they were Saharan mobile pastoralists or the 'roaming gypsies' of the English countryside – gradually came to be seen as harmful in their own ways, as obstacles to 'rational' economic development.

In 1830, twenty-two years after Charles Fourier wrote about the Sahara as a wasted opportunity, the French army conquered Algiers, finding ample space to test out the new theories of desiccation and environmental degradation. Apart from a few regions in the mountains and a relatively narrow strip along the coast, most of the land which was to become Algeria was made up of semi-arid or arid steppes, and a good proportion of Algerians were nomadic or semi-nomadic pastoralists. Forests played an important role in local prosperity as sources of fuel, fodder and food, and they were, just like pastures and in some cases also fields, owned collectively and managed through selective grazing and fires. Many of Algeria's most venerable cities, such as Tlemcen and Constantine, had long thrived through their intimate connections with such hinterlands.

Where local farmers and pastoralists could discern in the landscape a complex pattern of access rights and opportunities, the French colonial officers, looking for the green, undulating fields of the 'abundant granary of Rome' that their (mis)readings

of the first-century Greek geographer Strabo had led them to expect, saw only desiccation, mismanagement and sloth. Rather than questioning their classical sources, they blamed this 'degradation' of the land on its current inhabitants. A standard reference work on Algerian pastoralism, published in 1906, sums up the general consensus: 'The Arabs have been fatal ... it is their sheep, their camels, their goats that have ruined North Africa.'[7] It was thus incumbent on the French colonial regime to 'pick up the work interrupted for 1,500 years', that is, since the Arab conquest of North Africa and the fall of the last Roman colonies in the region.

This was to be achieved through protection, prohibition, sedentarisation and agriculture. The French colonial regime set out to protect the 'remaining forests', which were duly expropriated and closed to all forms of local use (and in many cases granted as concessions to national or multinational companies, to exploit for the production of cork, for instance). Next came the absolute prohibition of controlled fires and the exclusion of livestock from protected zones. Nomadic or semi-nomadic pastoralists were forced to become sedentary through the expropriation of collectively owned pastures and the privatisation of land. Finally, the immigration of (reluctant) French settlers introduced intensive agriculture, which was eventually handed off to large capitalist enterprises relying largely on Spanish seasonal workers.

Tiaret, where half a millennium earlier Ibn Khaldūn had penned his *Muqaddima*, was and had long been surrounded by fields of rain-fed cereals, but it was also situated at the extreme north of Saharan pastoral ranges. Saharan pastoralists used to arrive at harvest time with their herds of camels, goats and sheep. The poorer among them sought employment as seasonal harvesters;

the richer sold goods they had produced themselves or carried north from the Saharan oases: dates, cheese, leather, wool and livestock intended to be sold for meat as well as the handwoven carpets and blankets for which they were famous. They then let their herds graze on the stubble left by the harvest, fertilising the fields year after year. Each year, pastoral families tended to visit the same agricultural families, and these alliances, often strengthened through marriages and religious ties, could last over generations. They bound pastoralists and agriculturalists closely to each other, creating ties that could be drawn on in times of crisis – which, in the unstable climatic environment of the pre-Sahara, were always to be expected.

The French colonial government saw the region of Tiaret as prime agricultural lands from which pastoralists and their destructive animals had to be excluded at all costs. Their policies initially seemed to work, as the first two or three harvests on newly enclosed fields worked with the latest agricultural techniques produced spectacular yields. A few years later, however, the soils, deprived of their yearly input of manure, were exhausted; settlers had moved on and fields lay fallow, while nomadic economies had been severely harmed without their northern outlet. Overall, experts now estimate that the Algerian environment, where the vegetation had been relatively stable over centuries, suffered severe degradation from the colonial insistence on intensive agriculture in regions that quite simply could not support it. Deprived of their traditional human caretakers, forests died: deforestation in Algeria had never been as high as it was from 1890 to 1940.[8]

Repeated failures, however, did little to change French attitudes towards agricultural models. Indeed, many of the unspoken assumptions of nineteenth-century environmental theory, in particular the need to 'reforest' the region and the

hostile attitudes towards pastoralists, still persist and resurface in global anti-desertification campaigns today. The word 'desertification' itself, which started to be employed in the mid-nineteenth century and is still current in accounts of the region – indeed, in January 2021, another 16 billion USD were earmarked for anti-desertification programmes by international funding bodies – is symptomatic. It implies that 'deserts' are primarily a problem rather than complex ecosystems in and of themselves; it forecloses even the possibility of asking questions about the complex interplay that might link deserts to other areas and about those who dwell there and derive their livelihoods from this particular environment.

Technical Utopias

Given the failure of colonial agricultural policy, from the conquest of Algiers in 1830 until the discovery of oil in the mid-1950s, the Sahara figured more as a status symbol than as a physical region of human habitation or even as an economic stake in the scramble for Africa – to the point where, rifling through the colonial archives, one is often left to wonder why anybody bothered conquering it in the first place. (Mostly, it seems, to stop other people from getting there first.) For the French army, the vast and open spaces of the Sahara, unified under military rule, were primarily a stage for the display of grandiose, transcontinental territorial power, gained and maintained by reckless courage and political skill in the face of this most unforgiving environment on earth. British statesmen, on the other hand, mocked the millions of acres of 'light soil' that overly romantic French gullibility had made into the unprofitable semblance of an empire.

Yet for many in the late nineteenth century, the Sahara's apparent unprofitability was merely a matter of time and

ingenuity. If the desert had been a moral provocation to classical and medieval authors and an environmental failure to their successors, it now appeared as a technical challenge or indeed as an opportunity to push technical innovations to their limits through the construction of large-scale infrastructure that in more densely populated areas would have met with fierce popular resistance. Propositions ranged from plans to flood the Tunisian Sahara – much of which lies below sea level – in order to create an 'interior sea', which French colonial engineers hoped would automatically create a milder micro-climate, to the construction of a trans-Saharan railway linking the Mediterranean to the Gulf of Guinea. If the Americans had done it in the West and the Russians in Siberia, there seemed to be no reason why the French should not have their very own transcontinental railway to open up their very own agricultural frontier – in the Sahara.

French engineers believed strongly in the universal value of their undertaking. They also thought that the Tuareg, as 'light-skinned and blue-eyed Berbers', were kindly disposed towards French ideas of civilisation. They therefore decided to send the first exploratory mission to trace the route of the railway-to-be into the Sahara years before the French army had finished conquering the region – despite repeated warnings by Tuareg leaders that they would not tolerate an armed expedition on their lands. In 1881, all European members of this expedition, under the ill-fated leadership of Colonel Paul Flatters, were duly killed near Tamanrasset in what is now Algeria's southern tip; of the ninety-three members of the expedition, only twenty made it back to Ouargla. This caused outrage in France but for a while calmed the ardours of the pro-trans-Saharan-railway camp.

In 1905, the French army, equipped with machine guns and a solid spirit of revenge, wiped out most Tuareg resistance

fighters in the battle of Tit near the site of the 'Flatters massacre'. This brutally ended Tuareg sovereignty in the Central Sahara, but the costs of constructing a trans-Saharan railway (estimated at 600,000 francs per kilometre) remained forbidding. By 1949, when the project was finally shelved, only 252 kilometres had been finished, most of it relying on Vichy penal labour. Spanish revolutionaries, prisoners of war, Jews and local communists had toiled in grim and often deadly conditions similar to those imposed by other fascist regimes of the period, but to little avail.

No trans-Saharan train ever left Oran's central station for Timbuktu. Similarly, the interior sea never existed except on paper. But both visions lingered on in the popular imagination and in books from trashy 1930s bestsellers to Jules Verne's 1905 posthumous classic, *The Invasion of the Sea*. Similarly, the idea that 'the desert' could be 'subdued', or at least rendered productive and profitable through technological intervention, has not gone away. Plans for a trans-Saharan railway have been replaced by those for a trans-Saharan highway, put forward by the African Union since the 1960s and now nearing completion. Although Tunisia still has no interior sea, Libya daily pumps thousands of litres of clean water from the Sahara to the coast via its Great Man-Made River. Oil prospection since the 1950s has revealed large, sweet groundwater reserves under parts of the Sahara, which has since fuelled agricultural development in Egypt, Libya and Tunisia, particularly in the coastal regions, where fresh water is often scarce.

In 1970, the former Algerian president Houari Boumediène famously declared that 'where Algerians advance, the desert recedes'. A year earlier, he had launched a massive 'Green Dam Project', intended to 'stop the desert' by planting trees,

in conjunction with the Ministry of Defence. Twenty thousand soldiers, mostly conscripts, were mobilised. Boumediène's 'Green Dam' angered local pastoralists, who systematically uprooted trees, seen as encroaching on their traditional pastures. However, it inspired the then president of Burkina Faso, Thomas Sankara, to launch a similar idea in his country; this project was later taken up by the instigators of the Sahel-wide Great Green Wall (GGW). Launched in 2005 by the African Union and funded by the World Bank from 2006 to 2020 to the tune of more than 5 billion USD, the GGW was initially conceived as 'an 8000 km-long line of trees and plants across the entire Sahel, from the Atlantic coast of Senegal to the east coast of Djibouti – halting desertification and creating a huge swathe of green across the African continent'. So far, very few of these trees have materialised, and those few that have are mostly planted outside the desert proper – in areas where people know, from centuries of experience, that they actually have a chance of survival. Elsewhere, local people do what they can to divert GGW funds into projects closer to their own hearts: the construction of schools and medical centres, for instance, or a viable road network.

European interest in large-scale Saharan technical utopias persists regardless. Witness, for instance, the 2009 Desertec Industrial Initiative, which proposed to solve Europe's energy crisis by constructing a network of solar power stations throughout the Sahara and the Middle East. Connected to the European grid, these would meet 15 to 17 per cent of European electricity demands and provide an equal quantity for domestic consumption in the producing countries. By 2014, one financial and many political crises later, Desertec was abandoned by its European sponsors, only to be picked up by the Moroccan king Mohammed VI, eager to greenwash the country's international

reputation, which had somewhat suffered from revelations of political oppression and torture in the 1970s, 1980s and 1990s.

Since 2019, three concentrated solar power (CSP) plants have been functioning in Ouarzazate in the Moroccan Sahara, totalling 2 million mirrors covering 30 square kilometres of land and producing 6 per cent of Morocco's electricity consumption. By 2030, the king announced, another two sites would be added, one in the disputed territory of Western Sahara, which has been under Moroccan military occupation since 1975. In both cases, vast stretches of local pastures have been redefined, in language oddly reminiscent of the nineteenth century, as 'unproductive wastelands', that is, as empty space from which no dissenting voices will be heard.

From the Inside Out

So much, then, for the models and metaphors that have been used to make sense of the Sahara, from bird's-eye-view maps via models of bridges and barriers, wastelands and environmental degradation to imperial agricultural fantasies and technical utopias. With the benefit of hindsight, it is easy to see that they erred by responding to crucial preoccupations of their times rather than to the realities of the desert itself. Yet these models throw long shadows over our current understanding of the region and have crystallised into ideas that are often taken for granted – the 'free' and 'ungoverned' nature of nomads, for instance, or the necessary decline of mobile pastoralism, the 'unproductive' and somehow 'futile' nature of deserts or the bundle of values and preconceptions contained in the deceptively straightforward term 'desertification'.

Any approach to the Sahara has to take these ideas into account and pick them apart very carefully. But that is just the

beginning. The real challenge is to find new ways of thinking about the Sahara by taking our cue from Saharans themselves.

September 2009, somewhere near the long border between Algeria and Mali. Ghali's truck moved at a snail's pace. I had been granted a comfortable spot in the cabin next to the oldest of the three apprentices; the other two young men were now perched on the back of the load, holding on tightly as the heavy truck bumped over rocks and jolted in and out of old tire tracks, baked solid in the unforgiving heat. There were other passengers on board, but they, too, had to sit in the back – I was privileged, not so much as a foreigner, but as the only woman in the company. Moreover, I had been introduced to Ghali by his boss, an Algerian trader from central Algeria: 'Treat her', he had said, 'as you would a girl from the Tantawi family.' The Tantawi were one of the most influential religious families in the Algerian Sahara and beyond; they had hosted me so far during my stay in the Algerian south. And so Ghali and the others treated me accordingly: it took two days before anybody talked to me at all beyond a few respectful greetings. This was somewhat at odds with my aim of carrying out research with contemporary trans-Saharan traders, but it taught me an important lesson right from the start: the Sahara might look big on a map, but it is socially dense; wherever you go, people will already have situated you within their social worlds depending on who introduced you to the area.

Ghali was born and grew up in Tamanrasset in southern Algeria, but his family were originally from northern Mali. His parents were among the many pastoralists who lost most of their herds in the droughts of the 1970s and 1980s and migrated north. Since then, many of his family had drifted back south to the 'sweeter' lands of northern Mali. Ghali's job as a truck driver

not only promised him a regular income but also meant that he could visit them on a regular basis, providing them with staples bought at a lower price in Algeria. Ghali's own experience of a pastoral existence was thus at one remove, but this didn't prevent him from identifying with it: 'Nahnu *al-ruhhūl*, *we* are the nomads', he told me, grinning, including in a sweeping gesture his three apprentices, his Arabic-speaking truck-driving colleague, the few paying passengers, and, perhaps most importantly, the truck itself.

And he was right: it was very clearly his mobility that gave him access to the Algerian funds that in turn made the life of the rest of the family, in the bādiya, a possibility. Although herds have been reconstituted since the droughts, few herders can live off them alone, and all therefore need to have a son, brother, cousin or brother-in-law like Ghali. Although the situation was clearly exacerbated by the current economic, political and environmental context, this interdependence of different forms of life and sources of income has always been true to some extent. Hence my second lesson: to endure over time, everything in the Sahara has to be connected to something else. Facile categorical distinctions – between nomads and sedentary populations, pastoralists and agriculturalists, traders and peasants, white and Black – simply do not hold.

Like many other contemporary Saharans, Ghali's family was spread out over hundreds of kilometres, and he moved easily between different worlds, from the urban amenities of southern Algerian cities to the beauties of Malian pastures. Lesson number three: family matters, and this in turn means that women are crucial, as it is women who throughout the region are pivotal in the arrangement and maintenance of marriages and in charge of most of the everyday work of preserving emotional and affective bonds between people who might live thousands of kilometres

apart. Yet if close connections are cultivated and strengthened through marriage, it is also through marriage that families become large, diverse, far-flung and complicated: intermarriages between different linguistic, occupational, geographical and status groups have always been common throughout the Sahara and indeed fundamental for the working of Saharan societies and economies – but this does not mean that they have ever been easy.

Family is not all, moreover: Ghali's connections clearly spread much further. He worked as a driver for a well-known Algerian businessman, which meant that he could cross the Algerian border both ways without any difficulties. He stopped at every Islamic shrine on the way, asking for spiritual protection on his journey but also invoking the very real protection of the saints' contemporary descendants. He knew where to drop off portions of the Algerian petrol that filled the truck's double tanks to curry favour with Malian officials, how to talk to Algerian customs officials, which of his many passports to show at the border, when to be humble, when to be loud, where to give gifts, where to pass unnoticed. Lessons number four: never rely on just one type of connection, and five: connectedness does not imply equality.

Ghali clearly loved the open air of the bādiya and, to the consternation of some of his passengers, spent the first day of our journey staying put in his favourite spot just outside Tamanrasset. He knew how to live in the desert and how to turn Algerian subsidised staples into delectable desert food; most importantly, he knew how to look after his truck and took pride in its strength and beauty. Yet he also knew that truck driving was back-breakingly hard work that would eventually exhaust his youth and that most of the considerable profits made by his work were reaped by others. He also knew that it was dangerous:

during one of our trips, we were stopped by armed men looking for money. They let us go when they saw that there was a woman on the truck – that Ghali was, as he said, using the polite formula, 'travelling with family'.

This was in 2009. Northern Mali has since descended into armed conflict and war, the border with Algeria has been officially closed and Ghali has had to renegotiate his mobility with the new strongmen in the area. Yet whatever happens, there will always be a need for people like him – people who can connect places across national borders, supply them with necessary goods and maintain crucial ties at relatively little cost. Here, then, is the summary of his five lessons: connectivity is, and always has been, hard work, but it is essential to life in the region.

Ghali's five lessons inform the exploration of Saharan life in this book. It is divided into three parts – resources, movement and politics – of three chapters each. It follows a rough timeline, starting with prehistory and ending in the 2020s. However, the chapters are primarily thematic, and contemporary developments connected to particular issues (such as radical Islam or contemporary mining) are dealt with in the relevant thematic chapter. The reason is that this book is not a straightforward history but an invitation to think, together, through certain questions, to suggest different perspectives on current problems and to show the relevance of past events to contemporary concerns. Given the vast temporal and spatial distances covered here, these connections might otherwise pass unnoticed and more fundamental conceptual conclusions might be swamped in seemingly straightforward facts. This also means that not all of the Sahara is represented in equal measure in all chapters, nor is the account exhaustive, as indeed it could not be, given the scale of the region and the depth of time treated here. In some

places and on some topics, it is mostly an invitation to look for more.

Although this book has a strong historical and geographical focus, it is written by an anthropologist and remains indebted to anthropology in many ways. Much of it is based on fieldwork, that is, on direct experience of life in different parts of the Sahara and shared with different people, usually for periods lasting more than a year, in southern Algeria and northern Mali (2006–2009) and northern Chad (2011–12). None of the experiences recounted here, and none of the people described or cited, can stand in for the Sahara as a whole. I have attempted to represent their points of view and their internal diversity as faithfully as possible, but there are of course many others who, by the nature of things, I had no chance to meet or had to leave out – and there are probably as many things that I quite simply did not see or misunderstood. Anthropological fieldwork cannot be very directive, as people talk only if they feel like it and usually do so on topics that interest them. Nor do they necessarily agree with each other.

Most of the ideas, experiences and viewpoints presented here thus emerged from long conversations with Saharans themselves, who provided not just the 'raw material' of the book but also its frames of analysis. The purpose is to escape long-standing external perceptions of the Sahara – and of other 'wastelands' like it – as timeless, unchanging, empty and passive. In order to do so, we must challenge many of our underlying assumptions about desert life, and perhaps about life as such. Saharans, historical and contemporary, have much to say on these topics; let us follow some of them through the chapters of this book.

PART ONE

WHAT MAKES A DESERT?