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Neurology in Migrants and Refugees

 Springer

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Neurology in Migrants and Refugees

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Foreword

In this era of electronic communications and ready access to sources of information, textbooks containing the distillate of current knowledge are more valuable than ever. This is especially so when the topic is dealing with disparate conditions in ever-changing populations. “Neurology in Migrants and Refugees” is a prime example of such a paradigm.

Despite the current COVID-19 pandemic, migrants and refugees continue to represent an unmet need for specialist services and care. Neurological disorders cannot be ignored in migrants and refugees. More often than not, however, their need for services and care are faced by clinicians whose training and skills may not have equipped them appropriately. This textbook will prove a valuable resource for all those called to provide for these populations.

The editors have gathered a unique collection of authors, each in possession of experience and a broad perspective of their topics. The first four chapters deal with historical and cultural aspects of migrants followed by educational effects, environmental influences and importantly barriers to healthcare for migrants and refugees. There follows general reviews of host countries providing neurological care to migrants and refugees, their involvement in neuroscience and neurology research and the effects of the COVID-19 pandemic on migrants, refugees and ethnic minorities. Some 14 chapters deal with specific neurological disorders and neurological care. These emphasise the epidemiology, recognition, investigation, diagnosis and treatment of each neurological disorder in resource poor and resource abundant environments. Topics important for these populations are mental health disorders, neuroinfections, stroke, headache, epilepsy, movement disorders, multiple sclerosis, neuromyelitis optica spectrum disorders and Behcet’s disease. Dementia, somatisation and functional disorders and palliative care are all dealt with thoughtfully. Throughout these chapters, the constant theme, stated and unstated, is one of deprivation. We are reminded by this of the United Nations Sustainable Development Goals in the concluding chapter.

Overall, this textbook will prove helpful to individuals, groups and service providers for hospitals dealing with these often forgotten but not invisible populations around the globe. They are humans and deserve our best care. It is hoped that this textbook will enhance care and confidence with which it is provided. In this regard, its goal is in close alignment with that of the World Federation of Neurology to foster brain health and quality neurological care worldwide.

The World Federation of Neurology is grateful to the editors, Professors Mustapha El Alaoui Faris, Antonio Federico and Wolfgang Grisold, and to the Migrant Neurology Specialty Group for their efforts in producing this outstanding textbook.

William M. Carroll
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Preface

The book *Neurology in Migrants and Refugees* is the result of works and reflections of the World Federation of Neurology (WFN) Speciality Group (SG) on Neurology in Migrants, initiated in 2015 and chaired by Professors Mustapha El Alaoui-Faris and Antonio Federico for 5 years. The SG held several meetings in international congresses of neurology (WCN, EAN, Maghreb meeting) to raise awareness of the peculiarities of neurology in migrants to neurologists worldwide.

Members of the SG and international neurologists and neuroscientists with a large expertise in the field of global neurology have written the chapters of the book. The book is composed of four parts preceded by a Preface and a Foreword from the president of the WFN. The first part has two introductory testimonies and the second deals with historical, geographical and health problems of migrants and refugees; two world-renowned historians have written original chapters on migration in global history. The third part is dedicated to neurological and mental disorders in migrants; these chapters give an up-to-date knowledge on main neurological and mental disorders, adding specific motions on epidemiological, diagnostic and therapeutic issues that may involve migration and people living in low and middle countries. The content of the chapters has also been brought into line with the WHO Sustainable Development Goals (SDGs) and the 2030 agenda. The fourth part of the book proposes Future Developments on Migrants' Health and the Sustainable Development Goals.

Several chapters underline the importance of completing the goals of the United Nations 2030 Agenda as soon as possible. Thus, the development of adequate obstetric, antenatal and maternal care services must be among the essential public health priorities in order to reduce maternal and infant mortality, which remains very high in many parts of the world, especially in rural areas. Another health priority is the prevention, diagnosis and treatment of non-communicable diseases in order to reduce the rate of premature deaths due to diabetes mellitus, cardio-vascular diseases and cancers. Moreover, international programmes to fight the AIDS, tuberculosis and malaria epidemics in sub-Saharan Africa and South Asia must be maintained and supported during this difficult period of the COVID-19 pandemic. The establishment of universal health coverage worldwide remains the best way to protect the most vulnerable populations against economic shocks, social disasters and poverty. In addition to achieve health goals, education finds a prominent place in the 2030 agenda. The achievement of a quality education

should be offered to all students to develop entrepreneurship and innovation and to acquire professional skills allowing them a good integration into the workplace. The reduction of inequalities at work is also a priority of the agenda, in order to enable the most vulnerable social groups including young, women, migrants and ethnic minorities to have stable jobs and decent incomes. Finally, the fight against climate change worldwide is a key priority of the 2030 agenda because the future of humanity will depend on its success.

This book provides a synthesis of migrants' health in relation to the SDGs and the 2030 agenda, and an up-to-date overview on neurological diseases among migrants and ethnic minorities. The book will be useful to neurologists worldwide who can find appropriate knowledge for diagnosis and treatment when facing migrants with neurological disorders that are sometimes difficult to assess in the absence of clinical experience with this population. It will also certainly be very useful for international organisations, policymakers and non-governmental organisations working in the field of health and migration. We hope that the book will find an indispensable place in neurological departments libraries and will constitute a basic textbook for teaching neurology taking into account ethnicity, culture and health inequalities in the care of neurological disorders.

Finally, we want to thank the World Federation of Neurology for the endorsement of the book, and thank Springer for agreeing to publish this book in its prestigious collection dedicated to the Sustainable Development Goals.

Rabat, Morocco
Siena, Italy
Vienna, Austria
March 30, 2021

Mustapha El Alaoui-Faris
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Part I

Introductory Testimonies

Testimony: The Trauma of Migration. Considerations from a First-Line Doctor in Lampedusa

Pietro Bartolo

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And then the ship appears. The moment is that: of the ship on the over-the-horizon of human beings docking at the pier. My pier. The jolt of the bulkhead, the elbows that fly and around, the hooking of the walkway. In a normal world, we don't have to notice. A port is a port. It lives on its identical liturgies, its rites, even equal gestures, family cries, peremptory orders, familiar faces. A safe haven is safe. It's the sailors' safe harbor. There is also the patroness: our Lady of Porto Salvo, with her procession to the sea, the garlands of flowers, the faithful a little devoted and a little pagan. I mean, that's the port. That's my port, too. In fact, it was.

For years it has been the landing place of the Others. The Safe Port of the dispossessed. They come to meet me, with their eyes barred and looking fixedly in front of them. Without a single word, a whisper. Without a lament. They just look. From the look you have to understand loneliness, bewilderment, fear, depression, pain, deprivation, wounds. But also a thread of hope.

Here's the history. You, doctor with him or her. Yes, the history of the person who came out of the sea: sick, healthy? You've got a hundred, two hundred in a row, waiting for the verdict. You need to know, having to decide, in the footprint, in the precarious state of a stretch of quay. An obligatory protocol, a health assessment taken on the fly: the summary gaze to the body, the superficial palpation, the rhythm of the wrist, the pupil. And one more. Maritime rescue medicine or maritime pier medicine. Reworked there for there.

A medicine from the front of the harbor. Heal external wounds but struggle to track down and heal internal wounds. The former face each other and heal, the latter are the unsolved problem. For the migrant (and, often, even shipwrecked) the traverse of the journey is only part of the damage suffered. Here, of course, it is not worth talking about the evil words of the denialists of the phenomenon who comments on the landings pointing the finger at those who "quietly invade us". Quietly. These are falsehoods, mystifications, cheating. Here at the doctor, but also at all those who are called to welcome, driven by a sense of humanity and the ethical duty of relief, it concerns what people bring in. "Migratory trauma"

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is an ancient disease: if the movement from one's place is the result of a need, an obligation, consequently it represents a possibility, the only one, for salvation. And from here can only start the new task of the world here, questioned with the eyes of the world beyond. Caressing the soul, taking care with slowness of the mind that has lost the sense of identity on the way between the previous experience, sometimes even horrible, and the uncertainty of the new landing.

Of course, the doctor is a doctor. You have to do it by oath. But it almost came to me as an obligation to do something else. Having in my hands, in the truest sense of the word, the fleeing migrants, I thought that they could also be helped by other means. To make their tragedy known but above all their rights as people. I wrote two books—"Lacrime di Sale" (Salt Tears), with Lidia Tilotta, Mondadori edition, and "Le Stelle di Lampedusa" (The Lampedusa Stars), Mondadori. I helped produce two movies: "Fuocammare" (2016) by director Gianfranco Rosi, winner of the Golden Bear award in Berlin, and "Nour" (2019) by director Maurizio Zaccaro. Material works that I consider a kind of therapy for others. Not for the suffering migrant. But above all for those who have a duty to understand that suffering and to help overcome it.

So here is the field trial. You want to feel wrists, you want to feel heartbeats, you want to listen to lungs and goodbyes. Evil is deep down. Born at the moment of detachment from the starting territory, raised in the floor of a dinghy soaked in gasoline and brackish water, swollen out of

proportion in the unknown so coveted, but equally feared. We are the Other of others and inside the brain of the desperate traveler there is a whirlwind of thoughts, infinite pain, anger and desires. He challenges us this condition of suffering, he requires us to act, to get in touch to reach the goal of integration. It's not an easy process. Your patient's anxiety from afar—he had never thought of you and neither did you—is the painful link that accompanies the rehabilitation work. That of seeking a different balance. May it help to become aware of the status changed by the power of things.

Migration changes cultural training, makes the starting training fragile, complicates the one to be acquired on arrival. Simpler, perhaps, for young age, very complicated for those who are ahead in age. To take care, therefore, of inner processes, to cover them with new stimuli, to build the new mental structure without forgetting the world left even with regrets. It is natural that, in the stories, unforgettable images, thoughts and perceptions resurface. The trauma intervenes at this moment and only a very long and accurate work, in a continuous and intense relationship between the patient and the doctor, can sew the bleeding wound, fragile psychology, instability that wears down ideas and actions. Migration is also this: a path made on the legs, marked by a trail of violence. But also from the cultural loss of man. That leaves a void, a bleached page and that you should go back to coloring. A recovery that is really very difficult to achieve.



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Giovanni Bracco

The meaning of a poet's intervention in a mostly medical collection of studies based on human migrations, is found in a past imprint that connects medical and artistic research if we take into consideration that both have a focal interest in the "man": a journey through suffering, drive and frustration, a pursuit of happiness, or simply wealth.

The philosopher Diogenes of Sinope (412 ?—323 B.C.) used to walk with a lantern in broad daylight, and to whoever asked him the reason of his actions he theatrically answered: "I'm looking for a human being".

I'd like to add that Diogenes, as stated in his biography, was the first "cosmopolite", being used to address himself as a "citizen of the world".¹

There are many ways to address the issue of migrations, but the most convincing approach for me is the one that derives from humanistic and humanistic-scientific studies, because when we talk about migrants, we do talk about human beings.

Of course, other studies have the utmost dignity. Surveys and economic analysis tend to see migrations as a positive phenomenon necessary

both for the least developed countries as index of a potential growth—via the potential special relationship with industrialized countries—and for the countries of arrival, mainly vexed by a constantly decreasing birth-rate.

But I find the humanist's point of view the most convincing, and it should lay the foundations of any political action.

"Humans own the world" is the caption to a well-praised book by Giorgio Torelli,² a great Italian journalist, who described the many various cultures and places of our Planet.

Yes: humans own the world, which unfolds to their needs and curiosities, and only egotism and human fear can leave behind this elementary principle.

The "Wanderer", as the Romantic figure par excellence, is the best to explain this pre-existing human condition: a colonizer of a world, perpetually moving both to conquer and subjugate every possible space to our needs of survival and reproduction, and also, metaphorically, looking for answers to our existential questions, subject of the philosophical investigation.

The values which our western culture is based upon were outlined around the end of the

¹Diogenes Laertius, *Lives of Eminent Philosophers*, VI, 41 and 63.

²Giorgio Torelli, *Pagine di un passaporto*, Bologna, Cappelli, 1969.

Eighteenth Century: equality, fraternity, freedom.

Old and ancient values that, only after additional blood tributes—ended with the WWII—finally were commonly accepted and are now part of many countries' constitutive laws.

Particularly us, the Europeans, who built a union between countries battling with each other up until a few decades ago, we are constantly asking ourselves how is it possible that our world is still dramatically affected by wars and conflicts, dictatorships and terrorism, famine and poverty.

Those values resurface from an ancient past. It is nonetheless the daily bread of Jesus' teachings,³ even if related to an otherworldly expectation. It is the ancient.

Greece's consideration of having to respect the others, the "strangers", another source of lifelong learning for us.

In his supreme ancestors a poet finds a broad subject to study and a proof of this openminded and generous idea of humankind in relation to other humans.

Homer, who lived between the ninth and eighth centuries B.C., and told us in his poems about myths of centuries ago, announces the sacredness of the "visitor", a guest sent by Zeus to whom were offered gifts and hospitality.⁴

Odysseus is the quintessential traveler of literature. Dante managed to perfectly capture the intimate nature of the character, who feels the need to continue his journey (internal as well) even after having reconquered his beloved Ithaca

and marital bed with superhuman effort. Odysseus, in the Divine Comedy, encourages his companions to not give in to a life of "brutes" but to second the deep nature of men, that is to "follow virtue and knowledge".⁵

Even by simply following to the letter the Homeric poem, we can find crucial indications to draw from the well the essential distinction between civilization and barbarism: Polyphemus is the emblem of the inhumanity because he devours his guests instead of welcoming them.

More generally speaking, where hospitality is not practiced, weapons are embraced and war is no other than the antithesis of peace and well-being on which a true and lasting civilization is founded.⁶

What happened after the Homeric age, with important changes of perspective regarding "foreigners", pertains to the historical investigation and goes beyond the theme proposed here. Suffice it to say that it was the winning.

Roman civilization that establish itself as a model of inclusion and, therefore, of continuous regeneration, and not the Greek, which, at a certain point, raised barriers between the "barbarians" and the "free men", voting itself to failure.⁷ Wasn't Aeneas a refugee who escaped the destruction of Troy, the mythical founder of Roman times? Virgil's entire poem is the story of an exile who came from the sea with his loved ones.⁸

I report below the words of one of the greatest intellectuals of our time, Umberto Eco, to exemplify the torment that is still vivid in those who face the problem of relations with men from different cultures and ways of life, often opposed to ours in some basic values: "The fight against intolerance has its limits. Fighting against our intolerance does not mean having to accept every vision of the world and make ethical relativism the new European religion (...). There are values,

³One of the cornerstones of Jesus of Nazareth's teachings was the love of neighbor, as can be read in the Gospels. In Matthew (25.35) is quoted the famous "I was a stranger and you invited me in", an example amongst those good practices advised in order to survive Judgment Day.

⁴In the Odissey, the example of Nausicaa reprimanding handmaidens for not hosting Odysseus properly: "Strangers and tramps / it is Zeus who sends them: let's greet them. / A gift, even if small, it's appreciated" (Homer, *Odissey*, VI, 207–208).

In the Iliad, Glaucus and Diomedes meet face to face, they recognize each other and find out their grandparents were tied together by a bond of hospitality. They decide not to fight, and instead, exchange weapons. (Homer, *Iliad*, VI, 119–236).

⁵Dante, *Divina commedia*, Inferno, XXVI, 119–121.

⁶Luigino Bruni, *Non siamo ciclopi. Ecco perché l'ospitalità fonda la nostra civiltà*, Avvenire, 19th August 2015. For Polyphemus' episode: Homer, *Odissey*, IX.

⁷Ivano Dionigi, *Senza barbari che sarà di noi?*, Avvenire, 18th February 2019. From the same author: *Osa sapere*, Milano, Solferino, 2019.

⁸Virgil, *Aeneid*.

typical of the European world view, which represent a heritage that we cannot renounce. Deciding and recognizing what, even in a tolerant view of the world, remains intolerable for us is the kind of border that Europeans are called to draw every day with a sense of fairness and with the constant exercise of that virtue which, from Aristotle onwards, philosophers call *Prudenza*".⁹

I am not a historian of literature and, therefore, the repertoire of literary sources from times closer to us that I will use to exemplify the relationship between poetry and migration, is linked to my experience and my taste and not to the exhaustiveness of the discussion. Furthermore, again due to my lacking knowledge, I won't be able to take into account the poetry or poetic aspiration expressed by the migrants themselves. I do believe, however that this is a very fertile soil, which would deserve far more investigation, as it appears clear from a periodical publication, *Griot*, from *Civico Zero*, a Roma-based facility that takes care of minors from poor countries.¹⁰

The condition, especially personal, of "migrant" is particularly felt by the poets of our times. It is the condition of those who are constantly looking for the deeper self, during a journey not necessarily physical, and whose arrival point is not necessarily defined by the geographical point of view.

In the purest romantic conception, indeed the destination can never be reached as indicated in the final verses of the lied "Der Wanderer" from Georg Philipp Schmidt von Lübeck (1766–1849), put into music by Franz Schubert¹¹:

Ich wandle still, bin wenig froh,
Und immer fragt der Seufzer: wo?

⁹Umberto Eco, *Migrazioni e intolleranza*, Milano, La nave di Teseo, 2019.

¹⁰The word "Griot", in west Africa, indicates the minstrel that tells stories and epic poems in the streets, drawing from the community's memory and knowledge. www.civicozero.eu

¹¹"I wander silent, sad, / and I always sigh asking myself: where? / And always: where? / A mysterious voices answers: / "There were you are not, There's happiness!". Franz Schubert, *Der Wanderer*, op. 4 n. 1, D. 489, written work by Georg Philipp Schmidt von Lübeck.

Immer wo?

Im Geisterhauch tönt's mir zurück:

Dort, wo du nicht bist, dort ist das Glück!

In the poetry of Giuseppe Ungaretti (1888–1970) there are some compositions that investigate this unavoidable condition of man¹²:

Girovago

In nessuna

parte

di terra

mi posso

accasare.

A ogni

nuovo

clima

che incontro

mi trovo

languente

che una volta

già gli ero stato

assuefatto

E me ne stacco sempre

straniero

Nascendo

tornato da epoche troppo

vissute

Godere un solo

minuto di vita, iniziale

Cerco un paese

Innocente¹³

In another poem, "In memoria", Ungaretti takes an important step forward, from pure introspective investigation to consideration of someone else's experience, exemplifying a common identity discomfort:

Si chiamava

Moammed Sceab

Discendente

¹²Every Giuseppe Ungaretti's poems are in *Vita d'un uomo*, Milano, Mondadori.

¹³Wanderer

Nowhere / on earth / I can be / to stay / as at home. // In every / new / environment / I encounter / I find myself / longing / 'cause time ago / it was already / familiar // And since parting / I'm always a stranger // A newly born / returning from ages ago / fully lived // Enjoying / just one minute / of initial life // I am looking for / an innocent Country.

di emiri di nomadi
 suicida
 perché non aveva più
 Patria
 Amò la Francia
 e mutò nome
 Fu Marcel
 ma non era Francese
 e non sapeva più
 vivere
 nella tenda dei suoi
 dove si ascolta la cantilena
 del Corano
 gustando un caffè (...)
 E forse io solo
 so ancora
 che visse¹⁴

A completely different investigation, characterized by political and civil commitment, can be found in the poetry of Carlo Levi (1902–1975)¹⁵:

Ancora una volta tra gli emigrati
 Gli esiliati, i beduini, gli alienati,
 senza terra né lingua, né radici.
 (...)
 Ma non più gregge, schiavi rassegnati
 a destini che gli altri han designati
 (...)
 servi non più, nuovi protagonisti.¹⁶

Verses, those of Levi, that open to the artist's hope, supported by a strong political passion.

Civil and supported by political commitment, is certainly the poetry of the Palestinian Mahmoud Darwish (1941–2008), who personally knew the sufferings of exile and centered, in this lyric, the theme of man and relations with his neighbor in

their stripped, essential wholeness. What do we have in common, amongst other things? The pain of living. Equality in the face of death:

I do not know the stranger

I do not know the stranger, nor his accomplishments...

I saw a funeral, so I walked behind the coffin,

like the others, bowing my head in respect.

I found no reason to ask: who is this stranger?

Where did he live, and how did he die,
 because the causes of death are many,
 one of which is the pain of life.

I asked myself: does he see us,
 or does he see nothingness and regrets the end?

I knew he would not open the coffin that's covered

with lavender

to bid us farewell and thank us and mutter the truth.

What is the truth?

Perhaps he is like us in these moments,
 folding his shadow.

But he is the only one who did not cry this morning,

and did not see the death that is flying over
 us like a hawk...

The living are the cousins of death,
 and the dead are sleeping
 quietly and quietly and quietly.

And I found no reason to ask:

Who is this stranger and what is his name.

No sparkles shine in his name.

The march behind him was 20 people,
 except me.

And I became lost in my heart in front of the church doors:

Perhaps he is a writer, or a laborer, or a refugee

or a thief or a murderer... No difference,
 we are all equal in front of death...

They don't talk,

and perhaps, they don't dream.

This stranger's funeral could be mine,
 but a divine matter is postponing it
 for many reasons,

¹⁴His name was / Mohammed Sceab // Descendant / of nomad Emir / suicide victim / because he had no more / country // He loved France / and changed his name // He became Marcel / but wasn't French / and he didn't know how / to live anymore / in his parent's tent / where you hear the lullaby / of Quran enjoying a caffè (...) // And maybe only I / still know / that he lived.

¹⁵Carlo Levi, *Versi*, Bari, WIP Edizioni, 2009.

¹⁶Once again amongst migrants / Exiled, the bedouins, the estranged, / with no land, no language, no roots. (...) / But no more herd, slaves / that gave up to a fate that others defined (...) / slaves no more, but new protagonists.

one of which is: a big mistake in the poem!¹⁷

An atmosphere even more different in “The migrants” from Nobel prize winner Derek Walcott (1930–2017) where dawn turns into “deceitful” and the map indicates routes that all lead to “Nowhere”¹⁸:

(...)

all have been reduced into a common language,

the homeless, the province-less, to the incredible memory

of apples and clean streams, and the sound of milk

filling the summer churns, where are you from,

what was your district, I know that lake, I know the beer,

and its inns, I believed in its mountains,

now there is a monstrous map that is called

Nowhere

and that is where we’re all headed, behind it there is a view called the Province of Mercy,

where the only government is that of the

apples

and the only army the wide banners of barley

and its farms are simple, and that is the vision

that narrows in the irises and the dying

and the tired whom we leave in ditches

before they stiffen and their brows go cold

as the stones that have broken our shoes,

as the clouds that grow ashen so quickly after

dawn

over palm and poplar, in the deceitful sunrise of this, your new century.

We must trace back a 100 years in order to find, in Kostantinos Kavafis’ (1863–1933) poem “Waiting for the Barbarians” a furthermore different thought on the topic of contact between foreigners and us. And in the visionaries—and perhaps—prophetic concluding verses there is a reflection, in my opinion, of great relevance,

which alludes to a (missed) solution for our own survival as the “West”¹⁹:

What are we waiting for, assembled in the forum?

The barbarians are due here today.

(...)

Why this sudden bewilderment, this confusion?

(How serious people’s faces have become.)

Why are the streets and squares emptying so rapidly,

everyone going home lost in thought?

Because night has fallen and the barbarians haven’t come.

And some of our men just in from the border say

there aren’t barbarians any longer.

Now what’s going to happen to us without barbarians?

Those people were a kind of solution.

Summing up of these different poetic experiences on the universe of the “traveler-migrant”: the poet manages to extract from this set of themes the essential point that leads back to the most intimate sphere of the individual, in his experience as person who lives and wonders about the “where” as we’ve seen in Ungaretti and Schmidt von Lübeck. In another way, more adhering to the reality of flesh and blood of the migratory phenomenon, Levi, Darwish and Walcott sing the pain that—according to different sensitivities—is soothed by hope or ruthlessly confirmed by its negation (the “deceitful sunrise”). Kavafis’ famous poem introduces a further dimension, that of the confrontation between civilizations close to each other, that suppose some form of dialogue which, however, does not take place and leaves only a bad taste in the mouth for the lost occasion.

In my poetic adventure I’ve approached the theme of migrants, betting to be able to filter through the gaze of the lyric poet a tragedy that is also political, economic, civil. I knew the bet could be governed if the background of this way of dealing with the universe of migrations had

¹⁷Translated from Arabic by Ali Harb. Further informations about Mahmoud Darwish and bibliography in Wikipedia.

¹⁸Derek Walcott, *Collected poems 1948–1984*, New York, Farrar, Straus and Giroux, 1986.

¹⁹Konstantinos Kavafis (C.P. Cavafy), *Collected Poems*, Princeton University Press, 1975.

also been informed by the experiences mentioned earlier, which largely identify the journey with the search of one's self.

My collection of poems pledged to migrants²⁰ tries to give a voice to those who lost it at sea:

Ora che si è calmato e il movimento
delle onde mi culla in superficie
devo ammettere che non ho lottato
nemmeno un poco, troppo divergenti
le forze in campo in mezzo alla tempesta.
Voi non saprete mai se è la pietà
del mare o la sua cieca indifferenza
ad avere risolto ogni mia pena
e qualche desiderio ormai sfibrato.
Interratemi coi vestiti miei.
Dalle tasche germoglieranno datterì
semi d'acacia, miglio e di basilico.²¹

This is the song of the man who claims the right to sprout the good seeds that he brings with him wherever he likes.

Il mare mi ha deposto dalla croce
con le braccia sfinite, ancora larghe,
inerme come il Cristo di Mantegna.
Ma non portavo idea di redenzione,
altra salvezza urgeva ai miei vent'anni.
Già muovono alla spiaggia le Marie
per stendere il sudario.
Per occultare i segni
della vostra disfatta.²²

The death of every migrant represents a defeat for our world, for a Europe that too often betrays one of its basic aspirations: universal brotherhood.²³

²⁰ Giovanni Bracco, *Il mare mi ha deposto dalla croce – Mediterraneo*, Milano, La Vita Felice, 2019.

²¹ Now that the sea is quite and the motion / of waves cradles me to the surface / I admit I did not fight / not a bit, too divergent / the forces in the storm. / You will never know if it's the compassion / of the sea or blind apathy / that solved all my suffering / and some exhausted dream. / Bury me with my clothes. / From pockets dates will grow / seeds of acacia, millet and some basil.

²² Down from the cross deposed me the sea / with tired arms, still opened, / unarmed like Mantegna's Christ. But I / was not giving the idea of redemption, / other salvation urged to my twenties. / The Maries are approaching / the shore to lay the shroud. / To hide the signs / of your defeat.

²³ The European hymn is the Ode to joy, ending to the Ninth Symphony from Ludwig van Beethoven, that availed from Friedrich Schiller's verses.

Part II

Historical, Geography, and Health Problems of Migration

History of Migration

3

Patrick Manning

Contents

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Abstract

This overview of human migration presents the main practices of migration, their development over time, and their consequences. The emergence of syntactic language, some 70,000 years ago, gave rise to the basic practice of cross-community migration. In this practice, young adults move from one community to another, learning language and culture, exchanging and inventing ideas. This mechanism of dispersion and exchange, elaborated with time, has made and remade human

society, beginning with the expansion of human communities to varying habitats in all areas of the world. In additional practices, networks maintained contact and exchange among communities, consolidation brought the creation of societies and towns, and vertical migration brought hierarchical social structure. Historical consequences of migration included the transformation of local habitats and biota with worldwide settlement, changes in global climate as a result of agricultural expansion and contraction, and the exchange of global biota along with global transport. Migration is associated with current crises of inequality and environmental degradation.

The movement and exchange of migration commonly bring social conflict and losses. Overall, however, migration has served posi-

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tive functions in the human order, especially by reinforcing social and genetic diversity. Migration also shifts the perspectives of individual humans, leading to changes in outlook and knowledge.

Keywords

Accounting of migration · Climate change · Cross-community migration · Functions of migration · Future migration · Language networks · Occupying the earth · Regulation of migration

3.1 Migrant History

This chapter is to consider the history of migration in broad scope. By broad scope, I mean that the study of migration goes back to very early times, to the traditions and myths of origin of each people. Yet migration is also a recent discipline, as European scholars began to study urbanization and overseas migration in the nineteenth century. Today, with expanded disciplines of the social sciences, humanities, and natural sciences, we can explore the whole of the human experience through study of migration, reaching across time and space. To address this wide range of issues, I begin with a focus on human agency, tracing social construction of a sequence of migratory institutions and resulting flows of migrants. Then, at several points, I summarize the local and especially global consequences of human migration, including suggestions on how best to quantify and analyze flows of migration. I conclude by reviewing the functions of migration in society and hypothesizing projections of future migration.

As of a million years ago, tool-making hominid species had gradually spread from Africa to much of the Old World. *Homo erectus*, its body hardly distinguishable from our own, had teeth that were larger than ours and a cranial capacity averaging two thirds that of humans today. By 600,000 years ago, *Homo erectus* had given way to *Homo heidelbergensis*, with larger brain

capacity. Thereafter, *H. heidelbergensis* gave rise to three rather similar communities: Neanderthals in Europe and West Asia, Denisovans from Central to Eastern Asia, and *Homo sapiens* in Africa. All of these changes, while important, were gradual. From 70,000 years ago, the pace of change accelerated.

3.2 Late Pleistocene Innovations in Migration

A more rapid social change arose with the emergence of spoken language among *Homo sapiens* in Northeast Africa (now Ethiopia, Kenya, and Tanzania) some 70,000 years ago. Speech and articulate human interaction brought an expanded social order in this Homeland, leading to rapid migration and settlement in increasingly varied habitats. While details of the emergence of spoken language are not confirmed, I argue that syntactical language began in the interaction of children, playing with communication and forming communities of discourse. A community of at least 150 speakers then arose to sustain the vocabulary and especially the syntax of a language. This speaking community became the first social institution (Manning 2020a: 37–43). Communities and their languages expanded, divided, and spread with time; languages changed inherently over time in lexicon, syntax, and phonology (Manning 2020b).

The exchange of young migrants across communities—what I call “cross-community migration”—was an additional social institution of the new community of speaking humans (Manning and Trimmer 2020; Manning 2006). In cross-community migration, young adult migrants moved to different communities, where they had to learn new language and customs, thus facilitating exchange of knowledge, genetic exchange, and creation of networks linking communities through speech (Manning 2020a: 56). With this additional institution, human migration now became distinctive from that of other mammals. Language, community, and cross-community migration combined to form the basic model of

human migration: these practices supplemented the previous form of migration, the simple population expansion and colonization of new lands.

In the course of the next 50,000 years of expansion across the continents, humans of the late Pleistocene era, living as foragers, extended their basic model of migration. They relied on intimate ties within their communities and built two levels of networks beyond their communities. Among nearby communities, cross-community migration and periodic gatherings sustained *local networks*, sharing knowledge on each new habitat and speeding the colonization of additional lands. Further, *regional networks* linked localized communities into continental webs. The effectiveness of regional networks is attested by the exchange of technical advances over great distances; parallel exchanges spread archery, atlatls (throwing sticks), sewing and weaving. Dogs, who joined human societies some 30,000 years ago, most likely in northeast Asia, spread to communities on every continent.

By 12,000 years ago, a first wave of global consequences of human migration had taken the form of a human imprint on global habitat. Speaking humans had settled all of the continents and had seized a place at the top of the food chain. Our ancestors, an invasive species, modified the habitat of the many localities in which they settled, shifting the balance among other species and laying the groundwork for further migrations. The expansion of our species included absorption of competing hominid species, advances in technology, adaptation to new habitats, and innovations in representation, all relying on the constructed social institutions of spoken language, community, and cross-community migration. Migration, relying on high levels of intercommunication, maintained local communities, sustaining regional networks, and colonized new lands. In the dramatic ecological changes at the end of the Pleistocene, human communities innovated with larger social groups and by adding production of dwellings, containers, and some ceramics to their heritage of foraging. This sudden and variegated expansion, which relied on verbal communication for many of its particulars, tends to confirm the hypothesis that

spoken language and cross-community migration emerged together, roughly 70,000 years ago.

3.3 Variations in Holocene Migration

The Holocene epoch, opening 12,000 years ago and continuing until the recent past, brought change upon change, magnifying human leadership in the animal kingdom and developing additional patterns of migration. Humans expanded their productive skills, giving them increasing independence from the natural world. The results of Holocene-era expansion were both positive and negative: human society now exploited the Earth with an intensity sufficient to bring about climate change.

Holocene variations in the basic model of migration led in three directions. The amplified model of migration added processes of population dispersion, population consolidation and, more gradually, vertical migration and creation of hierarchies. Dispersion brought settlement of additional habitats; consolidation brought exploitation of existing habitats with denser populations and construction of more complex social orders. In a genuinely new variation on migration, vertical migration arose to enable the creation of social hierarchies. During the 12,000 years of the Holocene, these further variations on cross-community migration facilitated institutional and technological innovation, creation of new networks of dispersion and consolidation, and population growth.

In dispersion, the continued warming of the early Holocene reinforced the spread of migrants across distances. In West Asia, speakers of Afroasiatic languages moved from the Nile Valley to all of Northern Africa, the Levant, and Arabia; in East Asia, speakers of Chinese languages moved from southwest highlands to the northeast of today's China (Manning 2020a: 93–98). In the Americas, migrants moved eastward in South America and from North America into Meso-America (Manning 2020b).

In consolidation, the social organization of the Holocene epoch confirmed the concentration of

migrants by creating societies of 1000 or more members which formed by consolidation of six or more of the earlier communities. Formation of Holocene societies expanded the size of language groups, reinforcing social diversity and division of labor yet sharing an identity that we can call ethnicity. As the Holocene proceeded, agriculture arose in key centers—in Asia, New Guinea, Africa, and South America—and then spread within those regions. Initial crops included wheat, barley, rice, millet, sorghum, taro, and yams; domesticated animals included donkeys, goats, sheep, cattle, pigs, and chickens. Towns formed, reaching populations of 10,000.

Dispersion and consolidation in migration, in the mid-Holocene era, brought a second wave of global migratory consequences. That is, migration and expanded agriculture brought stable climate from the mid-Holocene to the Anthropocene. Climate stability, in turn, encouraged further settlement and social expansion. The multi-pronged argument of geologist William Ruddiman is central to this analysis (Ruddiman 2014). He began by noting that the post-Ice Age peak in insolation and temperature, 10,000 years ago, was followed by a decline in temperature and in atmospheric carbon dioxide and methane, as in the previous glacial cycles of climate. But in the most recent glacial cycle, the decline in carbon dioxide reversed and began a rapid rise from about 6000 years ago. Ruddiman showed that human clearing of forest and bush for farming, in many parts of the world, reduced the absorption of carbon dioxide by plant life and also increased Earth's reflectivity. These combined factors caused atmospheric carbon dioxide concentration to increase, preventing solar energy from escaping the earth and raising temperatures. In parallel, methane gas, arising from chemical change in wetlands and later from the burping and flatulence of numerous grass-eating large animals, is even more efficient in increasing temperature. Methane concentration, initially declining after the peak in insolation, began to increase 4000 years ago, reinforcing temperature rise. Ruddiman's explanation was that growing numbers of oxen, cattle, and water buffalo, pulling ploughs in farming—reinforced by the rise of

equine culture—combined to expand atmospheric methane 4000 years ago (Ruddiman 2014: 19–42).

The overall result, confirmed in recent analysis, was that the Earth's natural temperature decline was cancelled out by human creation of greenhouse gases, initially through forest clearing, then by intensive cultivation aided by animals (Vavrus et al. 2018). As a result, temperature from 6000 years ago until the twentieth century maintained a stability that was virtually unprecedented in climate history. This era of Holocene climatic stability, resulting from migration, towns, and agriculture, provided the basis on which human society and economy expanded and evolved dramatically.

In the late-Holocene epoch, 5000 years ago to 1000 years ago, the human model of migration continued its amplification. Social hierarchy added vertical networks to the horizontal networks of dispersion and consolidation. Despite long resistance by those who preferred egalitarian societies, states, warfare and empires expanded along with agricultural and urban societies (Flannery and Marcus 2012: 91–183). This was the era of early cities in Mesopotamia, the Nile, and Yellow River Valley. The Achaemenid state of Persia launched the first large empire in 550 BCE (2500 years ago), after which empires replaced each other until the twentieth century. Reliance on domestic animals, especially in the Old World, provided societies with food, motive force, fibers, and skins: horses expanded the scale of war and of enslavement. Technical and social innovations brought metals, water supply, and literacy. At the same time, farming populations dispersed in many directions: Indo-European speakers settled and opened farms in Europe and South Asia, as did Austronesians in island Southeast Asia, Bantu-speakers in the southern third of Africa, and farmers in North and South America. Fluctuations in climate, disease, and hierarchy continued in rural and urban societies.

The terminal Holocene epoch—the 1000 years from 800 CE to 1800 CE—brought an acceleration of change. The human model of migration gained a new level of activity, as a period of warming brought the expression of ambitions

both in expanded military conflict and in cross-continental and global migrations.

A third wave of global migratory consequences arose from this era's expanded volume of warfare, long-distance migration, and exchange. These human factors combined with epidemic disease to cause population decline and global cooling. This "Era of Collisions," as I call it, included collisions within human society and collisions of humanity with the natural world, bringing alternations of growth and disaster. The collisions included warfare among societies, expansion of both high-status and low-status migration, the creation of a fluctuating global commercial network, and epidemics and climate disasters resulting in part from human expansion. Viking, Fatimid, Song, and other conquerors built empires between 800 and 1000 CE. Steady warming took place from 700 CE up to 1250 CE. Such warming, causing population and agricultural output to rise, is well documented for Europe but also confirmed for other parts of the world (Campbell 2016). At the same time, in the regions where societies had built the densest populations and the most innovative technology, an era of warfare and social conflict unfolded along with the warm and humid climate. Examples on every continent document this era's warfare and successive imperial conquests, alternating with commercial expansion. The Mongol state, exploding from 1200 CE, became the extreme example of conquests in response to new opportunities. Then, after 150 years of Mongol conquest and widespread empire, epidemic disease checked the empire. Bubonic plague, perhaps facilitated by increased contact of the Mongol empire, spread beyond Mongol frontiers from the 1340s through Asia, the Mediterranean, and Europe, causing population, commerce, and empire to decline—and soon bringing similar decline to sub-Saharan Africa (Green 2018).

Ruddiman argues that these epidemics and war casualties show how changes in human society can reduce temperature as well as increase it (Ruddiman 2014). Declining population meant less farming—the fields became overgrown and herds of animals declined, so that carbon dioxide and methane emissions declined, resulting in

temperature reduction. Then, from the sixteenth century, Old World diseases caused a collapse in American populations, as confirmed in a recent genomic analysis (O'Fallon and Fehren-Schmitz 2011). This Columbian Exchange brought a decline in global temperature and may also have led to disease and population decline in the Old World that has not otherwise been accounted for, as exemplified by the case of syphilis. The Little Ice Age, a three-century worldwide decline in temperature, reached its low point in the mid-seventeenth century, thus responding in part to changes in human society.

Migration studies, expanding in geographic and temporal scope, are gradually revealing the long-term dynamics of world history from 800 to 1800. Such studies, clearly linking worldwide population flows since 1500, are beginning to show connections to pre-1500 populations and migration worldwide. Global commerce and warfare each expanded, with fluctuations, from the eleventh to twelfth centuries until they brought the opening of global maritime connections by 1500. Merchants turned especially to enslavement as they sought labor to support expanding commerce. From the fourteenth century, enslavement focused on African laborers so that, from the mid-17th to the mid-nineteenth century, the principal flow of international migrants was that of African captives crossing the Atlantic but also driven to the Mediterranean and the Indian Ocean. Atlantic flow reached 100,000 captive voyagers per year.¹

In an important analytical advance, migration scholars Jan and Leo Lucassen developed a comprehensive framework for accounting of migration, applying it to large and literate cultural and political units (Lucassen and Lucassen 2014: 3–54). Focusing initially on Europe (including European Russia), they tallied several types of both domestic and cross-border migration. For the period 1500–1800, they found the largest cat-

¹Thus, it may be argued that the ambitions of warriors and merchants amounted to an effort to create a hierarchical Human System, in which the rulers of empire formed a superior order, while the enslaved and inhabitants of colonies performed separate functions as subordinates.