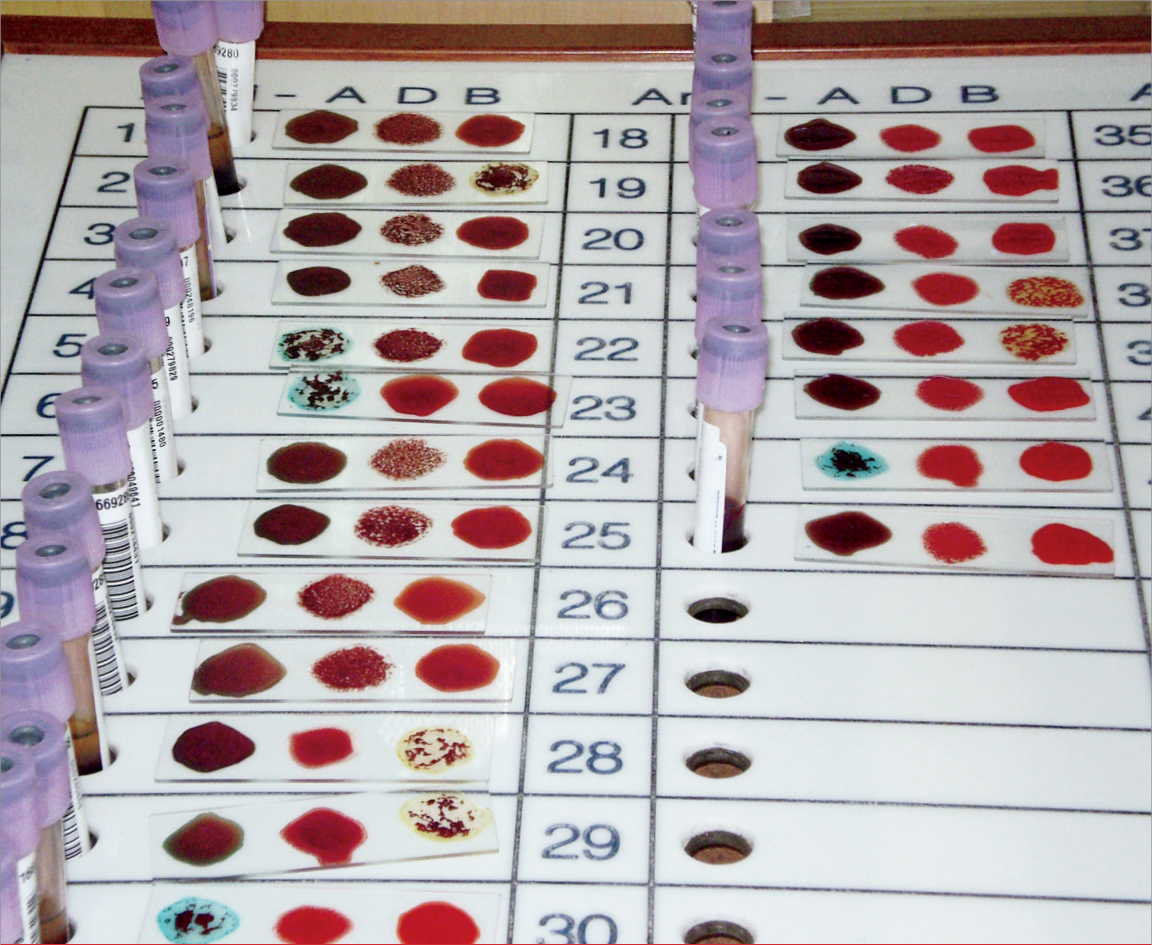




# BLOOD

# WORK

Janet Carsten

LIFE AND  
LABORATORIES  
IN PENANG

BLOOD WORK

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THE LEWIS HENRY MORGAN LECTURES

presented at the University of Rochester

Rochester, New York

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JANET CARSTEN

●  
● **BLOOD WORK**

● *Life and Laboratories in Penang*  
●

FOREWORD BY THOMAS GIBSON

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Cover art: Slides arranged on a lab bench for manual blood grouping  
(detail). Photo by the author.

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IN MEMORY OF SALLY LAIRD,  
1956–2010

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## FOREWORD

The Lewis Henry Morgan Lectures were originally conceived in 1961 by Bernard Cohn, who was then chair of the Department of Anthropology and Sociology at the University of Rochester. A founder of modern cultural anthropology, Morgan was one of Rochester's most famous intellectual figures and a patron of the university; he left a substantial bequest to the university for the founding of a women's college. The lectures named in his honor have now been presented annually for over fifty years and constitute the longest-running such series in North America. Morgan's monograph *Systems of Consanguinity and Affinity*, published in 1871, inaugurated the systematic cross-cultural study of kinship. Morgan's other two main areas of interest concerned the ethnography of Native North America, *The League of the Ho-dé-no-sau-nee or Iroquois* (1851), and the comparative study of civilizations, *Ancient Society* (1881).

It was to explore the way these interests had been developed by the discipline of anthropology over the subsequent decades that the first three Morgan Lecturers were selected. Meyer Fortes delivered the first full set of Morgan Lectures in 1963, which resulted in his monograph *Kinship and the Social Order* (1969). This was followed by lectures by Fred Eggan on Native North America in 1964, which resulted in his monograph *The American Indian: Perspectives for the Study of Social Change* (1966), and by Robert Adams on ancient Mesopotamia and Mexico in 1964, which resulted in his monograph *The Evolution of Urban Society* (1966).

As the fiftieth anniversary of the first Morgan Lectures approached, the Department of Anthropology decided to invite a series of three lecturers to speak on the same set of topics as the first three. In 2011, Professor Marisol de la Cadena delivered the annual lecture on the subject of indigenous politics in the Andes. In 2013, Professor Peter van der Veer delivered the annual

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lecture on contemporary understandings of the value of comparison. The present volume is based on the Lewis Henry Morgan Lecture that Professor Janet Carsten delivered at the University of Rochester on November 7, 2012, and the workshop held the following day. The formal discussants at the workshop included Eleana Kim and Sherine Hamdy, both now at the University of California, Irvine; and Ayala Emmett and Ann Russ, both at the University of Rochester.

Professor Carsten's monograph illustrates many of the transformations that the study of kinship has undergone over the past fifty years. Her research on the fluid meanings of blood in the highly technical and modern setting of Malaysian hospitals combines the concern of classical British social anthropology with kinship as a form of morality; of American cultural anthropology with kinship as a domain of symbols and meanings that are particular to each culture; and of science and technology studies with the processes by which modern societies attempt to purify social life into the separate domains of kinship, politics, economics, science, and religion.

By following the meanings of a single natural symbol as it flows from one "domain" to another, Carsten is able to call into question many assumptions that have guided social research in Malaysia. As she points out, most researchers focus on one or another of Malaysia's ethnic groups, which include the Muslim Malays, the predominantly Buddhist Chinese, and the predominantly Hindu Indians. This overlap between "race" and religion, and the way these categories are reproduced in an essentialized way by government policy and the media, makes it all too easy for the social analyst to accept these categories uncritically when conducting research.

In fact, very many—and possibly most—urban Malaysians work alongside members of other ethnicities on a daily basis, and the degree to which they have come to share similar sets of attitudes and values is a matter to be determined empirically. This is the methodological advantage of following a symbolically charged substance like blood as it flows from one body through a multicultural techno-sociological apparatus into other bodies. Each ethnic group has its own particular practices regarding the preparation, sharing, and consumption of food; rules relating to kinship, marriage, and childbirth; and long-standing political values and affiliations. Despite this sociocultural pluralism, everyone regards blood as a substance derived from individuals who have their own reasons for donating

blood and as a substance that can give life to any member of the whole human community.

Carsten concludes by arguing that the social and affective relations that are formed between coworkers of diverse ethnic backgrounds in even the most sterile laboratory environments are a necessary condition for the successful functioning of the Malaysian medical system as an integrated whole. More generally, she shows how the sharing of blood with the community at large is one of the ways in which Malaysia has become a modern nation whose citizens perceive themselves to be related to each other partly through idioms of kinship and family. In Malay terms, being *saudara* (kin) is derived from being of one blood—*satu* (one) and *darah* (blood)—according to at least some of her interlocutors’ etymology of a Malay term for siblingship that is often used for kinship in general.

It is a testament to the fluidity of the meanings of blood and kinship that an alternative etymology of *saudara* derives the term from the Sanskrit words *saha-* (together) and *udara* (womb), meaning uterine sibling. Following this etymology would lead us away from the concept of kinship as the sharing of a common substance and toward the concept of kinship as a form of sociality derived from the sharing of a common space such as a womb, a house, or a tomb, a notion that is found widely throughout the Austronesian language area. But as Carsten demonstrated in her earlier work on Malay kinship in a rural village on the island of Langkawi, *The Heat of the Hearth* (1997), there is no necessary conflict between these two meanings of *saudara*. Blood is held to be derived from the transformation of food, particularly breast milk and rice, and so the shared blood of kinship can be acquired through commensality within a shared domestic space. Similarly, in urban Malaysia, and perhaps in many other ethnically plural societies, the acquisition of a shared sense of national identity may occur through commensality and other forms of sociality within a shared workplace. It is one of the great merits of this monograph that it directs our attention to the way these micro-sociological interactions form the basis on which macro-sociological forms of solidarity such as shared national cultures may be either generated or undermined.

THOMAS GIBSON

Editor, Lewis Henry Morgan Monograph Series (2007–2013)

July 2018

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Writing and researching this book has been a process of serious debt accumulation. I am all too conscious of the many acts of unexpected kindness and generosity on the part of individuals and institutions that have made this work possible, and the many productive insights and comments from those who listened to or read earlier versions of this work. I am conscious too of the remaining flaws—which I claim as my own.

I am deeply grateful to the Leverhulme Trust, whose generous award of a Major Research Fellowship enabled me to carry out the research and to write over a three-year period from 2007 to 2010. Without that support, this work could not have been accomplished. I also thank the British Academy for a Small Research Grant that made a vital contribution to fieldwork expenses.

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The hospitals, doctors, and staff of clinical pathology labs and blood banks that are the subject of this book have been anonymized for reasons of confidentiality. I was welcomed with unfailing friendliness by staff in the hospitals where I carried out research, and was granted unique access to the spaces that I describe. I have no adequate words to thank those who answered my many questions and tolerated my presence with unfailing patience and good humor. I hope I have done justice here to their integrity, commitment, and hard work.

An earlier version of chapter 4 was previously published under the title “Ghosts, Commensality, and Scuba Diving: Tracing Kinship and Sociality in Clinical Pathology Labs and Blood Banks in Penang” in *Vital Relations: Modernity and the Persistent Life of Kinship*, edited by Susan McKinnon and Fenella Cannell (School for Advanced Research Press, 2013). Some material in chapter 3 appeared in an earlier form in an article titled “‘Searching for the Truth’: Tracing the Moral Properties of Blood in Malaysian Clinical Pathology Labs” in *Blood Will Out: Essays on Liquid Transfers and Flows*, special issue of the *Journal of the Royal Anthropological Institute* 19 (May 2013). I am grateful to the editors and publishers and to the Royal Anthropological Institute of Great Britain and Ireland for permission to use this material here.

It is a special blessing to have worked for many years in the most collegial, friendly, and intellectually stimulating setting. My colleagues and students in social anthropology at the University of Edinburgh have been unfailingly supportive and constructive at every stage of research and writing. I owe a particular debt to Richard Baxstrom, Ian Harper, Toby Kelly, and Rebecca Marsland for their encouragement and productive comments on early drafts of chapters at meetings of a small writing group in 2009–10. Jacob Copeman contributed his intellectual enthusiasm and expertise on blood on numerous occasions. Resto Cruz provided invaluable assistance at the final stage of manuscript submission.

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## INTRODUCTION

In the modern world, the Indian Ocean's cosmopolitanism was messy and inconsistent, and often it shattered under pressure. It developed as a cultural response to the demands of living in a world of strangers; its archive lies in popular culture, in the unwritten conventions of urban sociability, and in the shape of the landscape as much as in the writing of poets and visionaries.

—SUNIL S. AMRITH, *Crossing the Bay of Bengal*

No one knows why some individuals experience “pump-head”: a disturbance of mood and cognition brought on by having your blood moved beyond the confines of the body, but a charge nurse in a cardiothoracic intensive care unit told me that up to a third of her patients experience it. Many are violent as they come round; security guards have to hold them down as they are sedated with powerful antipsychotic medication. Some are merely quiet, “not themselves.” . . . Some become inappropriate and disinhibited.

—GAVIN FRANCIS, *Adventures in Human Being*

When I arrive in the operating theatre, about 15 people are already present—the anaesthetised patient on an operating table, the surgical nurses quietly harvesting veins from the patient's legs, as well as several other nurses and a group of nursing students observing surgery from the vantage point of a low platform near the head of the patient. Also present are three staff trained in cardiovascular perfusion (operating the heart-lung machine) and two anaesthetists. Pleasant music is playing in the background. The cardiac surgeon, Dr Ho, greets me with a courteous “Welcome, Prof,” and I thank him for allowing me to observe that

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morning's triple bypass surgery. Once the vein harvesting is completed, the patient is ready for surgery.

The heart-lung machine is being set up. Attached to the pump are masses of long transparent tubes, which connect to the tank. As they set up the machine, the medical perfusionists repeatedly tap different sections of tubes to make sure no air bubbles are trapped that might cause a fatal embolism. A point of high tension occurs when they transfer the patient from his own heart to the machine—it proceeds a bit like a rocket launch with a synchronised countdown and different tasks accurately coordinated. All goes well.

At the centre of the operating theatre everything is quiet and very concentrated—except when Dr Ho throws out a question to me, to the student nurses, to the perfusionist, or the anaesthetist. Outside this quiet centre, on the periphery of activities, there is a more relaxed atmosphere. A nursing auxiliary shows photos from a recent excursion up Penang Hill. In the lulls when he is not checking the heart-lung machine and its readings, the supervisor of medical perfusion jokes around, at one point conducting a fantasy orchestra. Anaesthetists and others come and go.

From time to time as the operation proceeds, Dr Ho asks the student nurses questions: “What do we call this?” (Answer, pericardium.) “What does this do?” Mainly, they fail to answer.

Dr Ho makes sure I get to see the live heart beating before bypass. The patient's head and neck are covered by green surgical sheets. One of the perfusionists tells me that the patient is divided into a sterile zone—where they are operating—and a non-sterile zone under covers. The result of this is that the patient doesn't appear like a live person at all. The skin of his legs looks waxy and inert, perhaps partly because of the lights—a bit like an anatomical model.

Dr Ho hardly appears to communicate with the surgical nurses by micro-signs; they seem to know what to do without being told. Instructions to the anaesthetist and the medical perfusionist are issued in a more ritualised fashion and then repeated back: “Pump down.” “Pump down, Dr Ho,” and suchlike. He teases the young perfusionist that the patient's life is in her hands—she is the most important person there.

At one point Dr Ho pauses to ask the student nurses, “How do we know this patient is alive?” No one answers. A moment passes before

Dr Ho continues, “The patient is in limbo—cooled to 28 degrees, and the heart is not beating. He is neither alive nor dead. We hope he’s alive. But we can’t tell till he’s taken off the pump.”

• • •

This edited extract from my notes of February 2008 was written after one of the more eventful mornings of my fieldwork in Penang. I had not planned to observe cardiac surgery. But I had been invited just that morning to follow the medical perfusionists who worked in the clinical pathology labs and blood banks in one of the hospitals where I was carrying out research—an offer that, after a few seconds’ hesitation, seemed impossible to refuse. Medical perfusionists operate the heart-lung machines that are essential to coronary bypass surgery, ensuring the continued transmission of oxygenated blood to the body and the removal of carbon dioxide while the heart is stopped. Dr. Ho’s question to the student nurses was a trick one, but it highlights what is indeed a mystery: at this point in surgery there was no way to know whether the patient was alive or dead.

Shigehisa Kuriyama eloquently poses just this question in the closing passages of his wonderful historical exploration of the divergence of classical Greek and Chinese medicine, *The Expressiveness of the Body*:

What separates the living from the dead?

Life’s presence is manifest to the senses, yet ever eludes the reach of our comprehension. We plainly see the metamorphoses of vitality in someone running, stopping, looking back, turning pale; we can hear the supple force of life in the sharpness of precise diction, and in the soft insinuations of tone; we can even grasp vital power with our fingers, here at the wrist, feel it pulsating or flowing. But in the end the mystery persists. (Kuriyama 2002, 271)

Blood, as we learn from Kuriyama’s study, and as I show in this book, is at the center of this mystery.<sup>1</sup> What separates the living from the dead? The answer perhaps seems obvious. And yet recent ethnographies from South-east Asia show all too clearly how reluctantly the dead may leave the living or the living may relinquish their dead. In central Vietnam, Heonik Kwon (2008) has described the remarkably vital and ubiquitous presence that “ghosts of war” continue to exert on the lives of the living more than

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twenty years after the cessation of hostilities. Evoking fear, humor, grief, or poignancy—and sometimes all of these at once—ghosts here seem just too full of life. In a more domestic and intimate register, in the Philippines, Fenella Cannell (1999) depicts the difficulty that Catholic Bicolanos have in separating after death and the potentially deleterious effects of this reluctance for the health of the living. When “the dead pull the living towards them,” further deaths are liable to ensue, and for this reason “the living must resist” (163).

But the subject of this work is not death or rituals of mourning. On the contrary, it is what in many cultures is viewed as the very stuff of life. Blood is not only essential for life, it is also often an idiom of connection between persons. In English, we speak readily of “blood ties” or “blood relatives.” The pervasiveness of such idioms makes it hard to focus on them or to subject them to an analytic gaze that might tease apart their resonance and significance, to calibrate the myriad qualities that supposedly “flow in the blood.” Anthropologists, like other proper participants in their own cultures, are prone to adopt such locutions as if they were self-evident and without always specifying when they are translating indigenous terms (Carsten 2011, 30; Ingold 2007, 110–11). In the field of kinship studies, anthropologists might be expected to think carefully about the meanings of connections that are articulated in terms of blood, but this is not necessarily so. David Schneider’s famous rendering of *American Kinship*, in which relatives are defined by blood, and blood is the symbol of “shared biogenetic material” ([1968] 1980, 25), to take just one example, not only occludes the relation between blood and “biogenetic substance,” but it also fails to probe the meanings of blood as a symbol in American culture or to take account of their instability (Carsten 2004, 111–12).

The starting point for this book, however, was not American kinship but a paddy field on the island of Langkawi in Malaysia. There, transplanting rice seedlings one morning with a group of village women in the early 1980s, and up to my calves in water, I had a conversation that has remained vivid over several decades. One of the women noticed me pulling a leech off the back of my leg and the trickle of blood where it came away. This immediately sparked a lively commentary on the nature of my blood—how red it was and how well it flowed, properties that were noted with approval. Over the subsequent months, on and off, there were further conversations about qualities of blood. Blood groups were a topic of particular interest—

Group O was thought to be best because of its universal donor status, and I was surprised by this knowledge. The centrality of blood to kinship and its derivation from food in Malay ideas were a focus of my research. And the very term for kin in Malay, “saudara,” is locally described as a contraction of *satu darah*, literally, one blood (see Carsten 1997, ch. 4). But what struck me in that paddy field was the realization that physical properties of blood were a subject of keen speculation and that, in ways that were not necessarily obvious, they connected to its symbolic range and potential.

In what may seem a bizarrely literalist move, the research described in this book was devised to explore the pathways along which blood travels as it moves between different domains of social life—kinship, for example, but also moral or religious ideas and biomedical ones. How do people negotiate between the physical manifestations of blood in everyday workplaces, such as clinical pathology labs, blood banks, or operating rooms, and its metaphorical allusions? What are the connections that enable this flow or the breakpoints that permit seemingly obvious connections to be severed? What properties of blood enhance an efflorescence of potential qualities and resonances? In short, what *is* blood? And what, if anything, could excavating something like a “theory of blood” contribute to our understandings of kinship and wider relatedness—or the persistent mystery, to which I have alluded, of the living and the dead? In planning this research, I hazarded that blood banks and clinical pathology labs might be interesting places to explore these questions. Malaysia, through my research experience and familiarity, was an obvious point of departure; Penang—with its long and complex history of trade, demographic diversity, its confluence of multiple ethnicities and religions, and its abundant medical facilities—seemed to offer particularly rich possibilities.

Like many ethnographies, this work is intended to be both of general and specific interest. It is at once an anthropology of contemporary urban life in Malaysia in multiethnic settings and an analysis of blood as bodily substance and symbol. Although my intellectual starting point has been kinship, this is far from being a conventional work on kinship. Instead, like its subject matter, it resists confinement to a particular domain. I depict aspects of social life in Malaysia, including interactions in the workplace, to illuminate how these are shaped by, and shape, processes of gender, ethnicity, kinship, class, and morality. The lens of blood allows us to observe these

social processes in action, paradoxically, by placing them in the background rather than the foreground. I did not set out to study gender, class, or ethnicity in the labs or blood banks; nevertheless, close observation of these spaces may tell us more about creating and erasing social distinctions in Malaysia than if they had been the explicit focus of my inquiries. In following “the social life of blood” in Penang, I have also aimed to understand more generally what blood is and how it works as a powerful and highly plastic symbol. This part of the story is both particular to Malaysia and an aspect of naturalization and domaining processes more broadly. The present chapter begins to explore the nature of blood and sets out the main themes and structure of the book. It also locates the research by introducing its setting in Penang and describing the process of fieldwork.

## Blood

What is blood? The central premise of this book is that the answer to this question is not self-evident. Its vital properties encapsulate the mystery of life and death—as my opening vignette suggests. The many meanings attributed to blood are neither knowable in advance nor stable across different historical eras and cultural contexts. What is striking, however, is the power and pervasiveness of blood symbolism in many cultures. Blood has an unusual capacity to evoke relational ties on different scales, to connote life and death, violence, sacrifice, and worth. Blood may denote physiological and social sameness as well as difference and, to a singular degree, its literal or metaphorical presence can elicit strong emotional responses. What gives blood this range of capacities? How does it operate as material substance, sign, and symbol? In the following pages I draw on a diverse anthropological literature to suggest some answers to these questions; the succeeding chapters pursue the argument in specific ethnographic settings.

Any discussion of the remarkable capacities of blood might justifiably begin with its material properties: its striking color, liquidity, warmth while in the body, its smell, and the way it solidifies and changes color when spilled. This nexus of physical characteristics makes blood unique.<sup>2</sup> One does not have to stray far from its physical properties to suggest reasons for blood’s capacity to evoke emotional responses (Taylor 1992; Turner 1967). The stopping or spilling of blood whether in illness, by accident, or with

intentional acts of violence may literally signal the difference between life or death. Within or beyond the body, too much blood flow or too little quickly have lethal consequences. Blood is bound up with life and death in equal measure.

So much, so obvious, one might think. But sometimes the obviousness of phenomena obstructs our ability to analyze them clearly or prevents us from seeing that there might be something worth probing further. The striking physiological properties of blood and its strong association with life and death are integral to its aptness for metaphorization and its generativity in symbolism. In Leviticus 17:1–15, blood is described as the animating life-force and the bearer of the soul (see also Anidjar 2014, 7). The consumption of blood is proscribed in Judaism and in Islam, and animals to be eaten must be drained of blood when they are slaughtered. The fluidity of blood in a healthy body may readily suggest agentive force, animation, and vitality (see also Feeley-Harnik 1995). Kuriyama shows how “in Chinese medicine, blood and *qi* [breath] were essentially the same.” They were “complementary facets of a unique vitality” (2002, 229).<sup>3</sup> In chapter 1 we will see that associations between blood and life are crucial in motivating donors in Penang to give blood. “Give blood; save a life” is a slogan used in donation campaigns that has wide public resonance. But the links between blood and life may also strike a chord with medical lab technologists. This may be marked in literal, material, and scientific terms by medical lab technologists as they go about the mundane tasks of analyzing and recording diagnostic test results or screening donated blood, as described in chapter 3. But such connections may also be evoked in more metaphysical ways when lab staff articulate the risks of their workplace, consider the importance of test results for patients, ponder the question of whether blood itself is alive, or discuss the possible presence of ghosts in the labs—as we learn in chapter 4.

An important contention of this book is that the unspoken elisions between these different ways of speaking about blood encapsulate not only the polyvalence of blood but also the way that meanings may be entangled with each other so that a reference in one register may carry the possibility of evoking responses in another. Blood is in many cultures a reservoir of familial, religious, and political symbolic meanings. In his exploration of blood and Christianity, Gil Anidjar refers to “the wide sanguification of rhetoric” (2014, 7). As anthropologists, how can we elucidate what enables such a

flow of meanings between supposedly separate domains? Can we render these processes visible and unpick their political salience? In the sections drawn from newspaper accounts that precede each of the main ethnographic chapters, I trace some of the resonances of blood in public media in Malaysia at the time of my research. The section that precedes chapter 3 describes how, at a highly fraught moment in Malaysian political life, a contested blood sample of the leader of the opposition, Anwar Ibrahim, was deemed to have the capacity to “reveal the truth” about his moral character. The extraordinary political showdown that climaxed with Anwar’s arrest in July 2008 on a charge of sodomy continued to play out for several years and resulted in his eventual imprisonment (see Allers 2013; Trowell 2015).

Blood’s literal capacity to flow, often associated with health and vigor, thus has metaphorical counterparts. In an earlier essay (Carsten 2011), I suggested that we might compare this propensity to the attributes of money and ghosts, which likewise tend to move between different spheres in apparently unconstrained ways. But there are areas to which neither money nor ghosts should have access. Ghosts of course are normally kept at bay from everyday life. Love and money are, in Western contexts, often claimed to be mutually antithetical (see Bloch and Parry 1989). Not unconnectedly, Richard Titmuss ([1970] 1997) famously argued that payment for blood donation put the safety of blood transfusion services at risk. Without undermining his pioneering insights, this book suggests that payment for donation captures only one small part of the risks to which donated blood is potentially vulnerable. It is the uncontainability of blood, its simultaneous permeability in multiple fields, that makes it so difficult to safeguard its security from contamination—as recent blood scandals in several countries have demonstrated.<sup>4</sup> Efforts intended to ensure the safety of blood, by preempting certain categories of people from donating, reinforce social exclusions and are thus prone to create further ricochets of resonance between different meanings of blood.<sup>5</sup>

In thinking through blood’s unusual characteristics, I have found a helpful entry point in Geoffrey C. Bowker and Susan Leigh Star’s (1999) discussion of “boundary objects”—objects that “can inhabit multiple contexts at once, and have both local and shared meaning” (293). Pertinently for this study, Star uses the term “boundary objects” to consider the ways in which scientists navigate different meanings (Star 1989; Star and Griesemer 1989)

but argues that the term is not restricted to scientific contexts (Bowker and Star 1999, 297). Boundary objects “have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation. The creation and management of boundary objects is a key process in developing and maintaining coherence across intersecting communities” (Bowker and Star 1999, 297).

Scientific work, as Bowker and Star note, is composed of different communities of practice and different viewpoints—they mention lab technicians and janitors (1999, 296). The scope of the current study includes blood donors, medical lab technologists and other lab workers, patients, and the relatives of people in these categories, as well as clinicians and others. It thus extends well beyond the realms of scientific practice, and this suggests that the idea of the boundary object might prove insufficient for the contexts described here.

In chapter 1, I consider the form that blood donors in Penang complete prior to donation as a kind of boundary object. The donor form is an important means by which blood, and the donors from whom it is sourced, is categorized. But I also ask whether the concept of boundary object could apply to blood itself. What would it mean to think of blood in this way? If such an attempt seems to indicate limitations to the idea of the boundary object, Bowker and Star’s attentiveness to processes of naturalization in the work of classification simultaneously suggests the possible analytic purchase of their concept. Blood’s unusual properties, I argue below, are strongly linked to its naturalizing capacities. Before turning to naturalization, however, another dimension of blood’s pervasive resonance is pertinent: temporality.

Probing the extraordinary polyvalence of blood, Kath Weston (2013) has shown how metaphors of blood that occur in contemporary depictions of the financial system enfold different somatic models with different historicities. Images of “lifeblood,” “circulation,” “flow,” “liquidity,” “hemorrhaging,” “stagnation,” or the necessity of “blood-letting” in the financial system occur alongside each other. While the circulatory model discovered by William Harvey in the early seventeenth century is predominant here, Weston elucidates how older notions that predate Harvey’s model are also present. In another striking case, Brazilian peasants described by Maya Mayblin (2013) use a modern technique of intravenous rehydration to replenish the fluid in

their body when they feel unwell, but in so doing they evoke a Catholic imagery of Christ's sacrifice in which blood, sweat, tears, and water can be seen as transformations of each other and have a particular local ecological and religious salience. In a quite different setting, Jacob Copeman (2013) has described how the importance of the literal use of blood to paint the portraits of Indian martyrs of independence is intended to evoke the past sacrifice of those martyrs and also vividly reminds the viewers of these paintings that their own blood may be called upon in further acts of political sacrifice in the future. In a radically different context, Emily Martin (2013) has depicted how contemporary medical discourses surrounding MRI scans of the brain, from which blood has mysteriously been purged, reveal a deeper archaeology in which different kinds of blood, referring to somatic models with a different historicity, occur in a gendered hierarchy in the body.

In all of these examples, blood evokes understandings that originate in different historical epochs, but these are collapsed and condensed into particular images, locutions, or practices. A similar entanglement of temporalities is suggested in chapter 4, where medical lab technologists move between radically different registers when they refer to the specific results of diagnostic tests in scientific terms but also speak of the "mystery" of blood and its unique capacity to reveal the truth. The unusual truth-bearing quality of blood has been noted in quite different cultural contexts (see Bildhauer 2013; Copeman 2013). Blood, as Copeman (2014, 10) pithily observes, "is a substance that contains its own historicity." And different evocations or imagery of blood may resonate with, or comment on, each other (Copeman 2014, 10).<sup>6</sup> The relational capacities of blood suggest that we should emphasize the plurality of these historicities. Such implicit temporal entanglements both reinforce and complicate the emphasis that David Warren Sabean and Simon Teuscher (2013) have placed on an apparently more straightforward and chronological historical specificity of ideas about blood in European kinship.

Mayblin (2013) has observed that, for the Brazilian peasants she studied, the transubstantiation of wine into the blood of Jesus in the Eucharist is a literal truth, essential to their sense of the beauty of, and aesthetic pleasure in, the Catholic Mass. She notes that a crucial quality of blood is that it can function as both metaphor and metonym—and this is central to theological debates about the Christian Eucharist (see Bynum 2007). In this sense, the

link between Christ's sacrifice and the daily sacrifice of labor is made tangible. Metaphorical and material understandings of blood are in constant play with each other, and this is part of blood's heightened capacity for naturalization and its symbolic power. It is as though blood's animation exerts its own force of propulsion, extending in multiple directions from material to metaphorical realms and vice versa.

Drawing attention to this interplay of signification in multiple directions, Weston emphasizes "the generative possibilities of blood, as well as its ability to pre-empt debate as it naturalizes social processes, and perfuses multiple domains" (2013, 33). She uses the term "meta-materiality" (35) to convey that what is invoked goes beyond both metaphor and the material—but also, and simultaneously, relies on both the material and the metaphorical to generate further resonances and further naturalizations. Anidjar, in a related discussion, argues that the distinction between literal and symbolic blood is an artifact of Christianity, "an essential mechanism for the distribution and operations of blood in Christianity. . . . Blood, therefore was never a physiologic or medical substance *first*, which would *later* have acquired symbolic dimensions" (2014, 31, emphasis in original). As a metaphor, he asserts, "it does not relate to a literal term" (256). "Blood work," we could say in Latourian terms, entails both hybridization and purification. This suggests that, despite the observable processes of "purification" in the labs described in chapter 3, which aim to "objectify" blood, it can retain subject-like qualities. Blood thus repudiates the dualisms of object and subject, the material versus the immaterial.<sup>7</sup>

All of the qualities considered above contribute to blood's emotional salience, and evocations of blood thus have unusual political potency.<sup>8</sup> In a directly political context, the multitemporal evocations of blood I have described echo Katherine Verdery's discussion of the importance of temporality in a quite different bodily practice—the reburials of national figures in postsocialist Eastern Europe. Such reburials, she suggests, involve "reconfiguring time" because they both alter understandings of temporal process and involve the revision of history—and are more powerful for the fact that the revision of history had earlier been a prominent feature of Communist rhetoric and practices (1999, 112–15). Joost Fontein and John Harries (2013), following Paola Filippucci et al. (2012), suggest that it is also the openness and incompleteness of human substances, their metonymic qualities, that underlie "their

resistance to processes of ‘purification’ and stabilization” (Filippucci et al. 2012, 211; see also Fontein and Harries 2013, 120). Bodily stuff here provides a potent set of symbolic associations that can readily link personhood, family, kinship, and nation.

Verdery’s insights are taken up in Nikolai Ssorin-Chaikov’s (2006) analysis of the importance of “heterochronicity” (the simultaneous coexistence of different temporal references) in Soviet displays of birthday gifts to Stalin in 1949. The rituals that Verdery and Ssorin-Chaikov examine are more organized and politically explicit reworkings of time and history than the implicit, layered invocations of blood that I discuss here. But these authors remind us of how temporality is woven into the legitimating effects of ritual (see also Bloch 1977). And Ssorin-Chaikov argues further that “heterochrony constitutes a hegemonic idiom for expressing a whole spectrum of political relationality” (2006, 371).<sup>9</sup> We can apply these insights to the iconic importance, mentioned above, that the blood sample of Malaysia’s opposition leader, Anwar Ibrahim, suddenly assumed in the country’s political crisis of 2008. According to newspaper reports, Anwar’s blood (which he refused to allow the police to take) was sought, the government claimed, as an object of “scientific testing” that could be verified by “foreign experts.”<sup>10</sup> Simultaneously, the rhetoric of politicians, as reported in the media, asserted that Anwar’s blood sample had the capacity to reveal the truth about his moral status, and here the reference was apparently to a quite different and much older language and understanding of blood. But the relation between these two registers—one scientific, the other moral—and what exactly might be at stake was left almost entirely implicit in these reports. We can thus see blood as providing a particularly condensed form of the political potential of repertoires of time that are encapsulated in material objects and of the capacities of bodily matter for “meta-material” elaboration.<sup>11</sup> The resistance of bodily substances to any easy classification into human/nonhuman or subject/object categories suggests that this may be a crucial aspect of their symbolic potency.

If some objects are, as Bowker and Star suggest, “naturalized in more than one world” (1999, 312), blood would seem to be a paradigmatic case of multiple naturalization. Such objects, they write, “are not then boundary objects, but rather they become standards within and across multiple worlds in which they are naturalized” (312). Their focus is on the role of

boundary objects and infrastructures in classification, and they view naturalization as a key part of the process by which categories become objects that exist in different communities of practice and enable communication between them (298). This in some respects seems an apt approach to the dense flows of meaning that blood enables between different realms and its capacity for being naturalized as well as enabling further naturalizations to occur.<sup>12</sup> But the instability of meanings and the wide range of contexts in which blood partakes also raise questions here. The idea of a standard in a scientific sense appears to have only limited application to blood, and in highlighting temporality we have gone considerably beyond the idea of the boundary object to grasp how naturalizing processes work.

The political implications of the extraordinary metaphorical potential of blood rest partly on the conventionalization that Dedre Gentner et al. have pointed to as part of the “career of metaphor” (2001, 227). The more entangled blood’s multiple resonances and metaphorical allusions become, the more familiar they seem, and the more difficult it is to see them clearly or to subject the assumptions into which they are enfolded to analytic questioning. “A naturalized object,” Bowker and Star write, “has lost its anthropological strangeness. It is in that narrow sense desituated—members have forgotten the local nature of the object’s meaning or the actions that go into maintaining and recreating its meaning” (1999, 299).

The work of historians in uncovering the unstable religious, familial, and political salience and embeddedness of blood in particular periods and cultural contexts in Europe is important in elucidating the force of this naturalization and its ability to enfold ideologies of exclusion (see, for example, Bynum 2007; Nirenberg 2009; Johnson et al. 2013). The reservoir of historical meanings of blood in Europe goes very deep and has retained in the twentieth and twenty-first centuries a capacity to resurface in new and powerful ways.<sup>13</sup> Importantly, as historians of science and medicine have shown, the scientific development of processes of transfusion, blood banking, and typing for medical purposes in the first part of the twentieth century was thoroughly culturally inflected and embedded in local histories. Such studies reveal how the trajectories of these developments were shaped by locally and historically situated understandings of, for example, “Soviet personhood” (Krementsov 2011), “race” in the US (Lederer 2008, 2013), or a supposedly egalitarian “community of strangers” in wartime Britain (Whit-

field 2013). As Aihwa Ong and Nancy N. Chen (2010) show, contemporary developments of biotechnology in Asia continue to take locally specific forms and are embedded in a “situated ethics” (Ong 2010a, 12) that encompasses families, communities, and nations.

A rich body of recent anthropological literature has explored the contemporary salience of blood donation.<sup>14</sup> This work illuminates the myriad ways in which blood donation rests on and elaborates local practices and ideas of gift-giving, sacrifice, kinship, and ethics, as well as institutional structures, simultaneously drawing on and generating idioms and symbols with political and religious potentiality.<sup>15</sup> Catherine Waldby and Robert Mitchell (2006) convincingly argue that any simple dichotomous reading of blood or other tissue donation in terms of gifts versus commodities (*pace* Titmuss [1970] 1997) is inadequate to address the complexities of contemporary biotechnology practices in what they call global “tissue economies” (see also Frow 1997; Healy 2006), and to address the issues of “bioavailability” (Cohen 2005) in which tissue economies are situated. The meanings that may be ascribed to blood (or other bodily) donation, as is shown for the Malaysian case in chapter 1, exceed the conventional limits of the anthropological domains of politics, religion, economics, medical anthropology, and kinship. Conversely, rather than narrowing the range of meanings in which blood participates, medical and biotechnological practices apparently further expand its polysemous potential. But this excess also renders the symbolism of blood unstable and may have unpredictable political consequences, as was evident in the Malaysian political drama of 2008 described earlier.<sup>16</sup>

The development of safe procedures for the procurement and transfusion of blood in the first part of the twentieth century required its categorization into blood types and new technologies for storage (Lederer 2008, 2013; Whitfield 2013). This work of classification rested on domaining practices that would safeguard blood from contamination and minimize the occurrence of immune reactions to transfusions of the wrong type. Titmuss’s contribution, referred to above, in developing policies that would best ensure the safety of donated blood by excluding payment for donation can be understood in this light. But simultaneously, as the ethnography presented in chapter 1 shows, blood donation actually requires that donors respond to familial, civic, and emotional appeals. Beyond this, it is remarkably difficult, as becomes clear in chapters 2, 3, and 4, to exclude the social

world of Penang and its histories of relatedness from the spaces and work processes of the labs and blood banks. In this sense the spaces of the labs are highly ambiguous. While blood work depends on maintaining boundaries between these spaces and the outside world, the resilience of such boundaries is difficult to ensure. This is partly because medical lab technologists and other staff are social actors with their own dense networks and histories of relatedness. But it is also because the blood, which is the focus of their work, originates and is donated in social worlds.

The fact that blood is a highly visible, vital (in all senses), and naturally occurring substance heightens its capacities for symbolic elaboration (Douglas [1970] 2003) and for naturalization. What, after all, could be more obviously natural than that which is already natural? But this apparent naturalness also obscures the multiple resonances of blood. The student nurses in my opening vignette, who were nonplussed by Dr. Ho's question as to his patient's vital status, might, I suspect, have been uncertain not just about the correct answer but also about the way the question had been intended. Physical presence and symbolic potency, as we have seen, feed each other. This gives special power to metaphors of blood and enhances their potential to convey similarity and union at the same time as difference and exclusion. In an exploration of the effects of the new genetics on anglophone idioms of blood in kinship (see Finkler 2000; Rapp 1999), Sarah Franklin (2013) argues that the historical depth and embeddedness of these idioms makes them surprisingly resilient and resistant to displacement. As she trenchantly puts it, blood is "thicker than genes" (295) and for this reason, "We may be just beginning to appreciate how much more the kinship significance of blood has to teach us about understandings of genetic relations, rather than the other way around" (303).

One important feature of blood to emerge from the discussion so far is its simultaneous universality and specificity.<sup>17</sup> Many of its attributes, such as its plasticity, symbolic velocity, and its association with animation or its negation, can be discerned across cultures and historical eras. But the meanings and metaphors of blood are historically and culturally shaped; they have local salience and resonance and are responded to in ways that are formed in particular contexts and specific junctures. Within and beyond these spatial and temporal locations, blood both unites and divides. It can be an idiom of shared humanity or one of discrete social strata or kinds;

it can signify belonging or exclusion in terms of kinship, gender, ethnicity, “race,” and nationhood. Blood is thus a powerful lens through which to examine minute social processes in what we might think of as the relatively “uncontentious spaces” of hospital clinical pathology labs or blood banks. The elusive prospect of being able to observe “naturalization in action” may be especially enticing where—as is the case for Penang—these workspaces are embedded in a social context with a long history of ethnic and religious diversity.

## Penang

Penang is generally considered atypical of Malaysia. The reasons are mainly historical but have left a strong contemporary imprint. Located off the northwest coast of peninsular Malaysia in the Straits of Melaka, Penang Island (Pulau Pinang in Malay) together with its hinterland on the peninsula, Seberang Perai (formerly Province Wellesley), form the state of Penang (Negeri Pulau Pinang). Penang, Pulau Pinang, or Tanjung (in Malay, literally, “promontory,” “cape,” or “headland”) are the terms used locally to refer to the island and to its state capital, George Town.

Formerly part of the Malay state of Kedah, Penang was established as a British colony by Francis Light in 1786. There followed an influx of migrants from other parts of the region: Kedah and other Malay states, Aceh in Sumatra, Siam, and Burma, as well as from farther afield—the Arabian peninsula, India, and China. Eurasian Catholics from Melaka, who sought refuge when the Dutch took control there from the Portuguese, were joined by Sufis from Kedah following the Siamese invasion of Kedah in 1821, which intensified migration from there (see Bonney 1971). Today the imprint of these many migratory flows can be seen in the street names and places of worship of George Town, where a dense network of streets, mosques, churches, Buddhist temples, Chinese association buildings, and Hindu temples are clustered within a short distance of each other (Tan 2009, 10–11; see also Khoo 1993).

By the early nineteenth century, the Kuan Yin temple, Kapitan Kling Mosque, Acheen Street Mosque, Nagore Shrine, Mahamariamman Temple and St. George’s Church were already built at their present

locations, within walking distance of one another. Nearby was the Catholic Church of the Assumption and not far away an Armenian church. Similarly assorted streams of Buddhism from Siam, Burma, Ceylon and China flowed into Penang, each with its temples and followers. (Tan 2009, 11)

Tan Liok Ee's frame of "conjunctures, confluences, contestations" illuminates how nineteenth-century flows of migration created a uniquely diverse and dynamic population in which "mixed marriages were not uncommon" (2009, 13). Arab, Indian Muslim, and some Chinese men married local women, forging economic and political bonds and giving rise to distinctive Arab and Jawi Peranakan (locally born Muslims of mixed Indian and Malay descent) and Baba-Nyonya or Peranakan (mixed Chinese Malay) populations in which different cultural elements, including cuisine, dress, and language, intermingled to create new and distinctive forms, many of which persist today (see DeBernardi 2004, 22; Tan 2009).

Demographic diversity was not, however, simply a process of blending and merging. It resulted in a plethora of different communities with their own religious, political, economic, and educational institutions. In the early twentieth century, a lively political culture and local printing presses fostered various strands of regional nationalism and modernist Islamic reform movements.<sup>18</sup> Religious education for rural Malays took place in Muslim *pondok* schools, Indian Muslim schools, and *madrasahs* established by Arab immigrants. Several English-language schools as well as Anglo-Chinese and Chinese schools were founded throughout the nineteenth century—many still in existence today. Schools were sites of both mixing and separation along ethnic and class lines: children of Malay, Indian Muslim, and Arab descent were brought together at Islamic institutions. Chinese schools taught children from different dialect groups and clans, while English-language education was restricted to an ethnically plural elite. Teachers came from all over the world (Tan 2009, 12–13). Apart from becoming a regional center for Islamic education, Penang was also an embarkation point and hub for pilgrims going on the Hajj from northern parts of the Malay peninsula as well as Sumatra and Siam (see Tagliacozzo 2013). In the early 1980s, villagers I knew in Langkawi who were going on the Hajj would travel first to "Tanjung."

The main impetus behind this cosmopolitan migration to Penang came from its status as a British entrepôt, the international and regional trade that passed through the island, and the economic opportunities it afforded. In 1867 Penang became a Crown colony together with Melaka and Singapore as part of the Straits Settlements. From the early nineteenth century, Singapore gradually superseded Penang as a center for international trade, but Penang remained a major hub for regional trade.<sup>19</sup> The cosmopolitan culture of Penang was not, however, without economic and political tensions. Concomitant with migration and urban growth, the Malay population became a minority and tended to be settled in the rural areas, while economic and cultural life in urban George Town was dominated by Arab, Jawi Peranakan, and Chinese traders with a growing body of Chinese associations (Khoo 1993). Competition over economic resources throughout the nineteenth and early twentieth centuries resulted in periodic outbreaks of violence between different secret societies involving Chinese, Malays, and Indians on both sides.<sup>20</sup> Religious, cultural, class, educational, and linguistic differences within what were heterogeneous Chinese, Indian, Malay, and Jawi Peranakan, or Arab, communities also mitigated against the formation of stable political alliances within and between these groups.

Occupied by the Japanese from 1941 to 1945, Penang was severely affected by World War II. The memories of this period as a time of extreme hardship are still vibrant today. When I interviewed lab staff about their family backgrounds (see chapter 2), several of them mentioned to me how their parents' education had been disrupted by the Japanese occupation. Some had family members who were part of the Communist resistance and later fought against the British in the "Malayan Emergency" of 1947–60.<sup>21</sup>

The political landscape of post-independence Malaysia entailed further shifts. Distinctions between "Malays," "Chinese," "Indians," and "Others," derived from colonial census categories and perceived locally in "racial" terms (see chapters 1 and 2), were inscribed in government policies, and on the identity cards required of all Malaysian citizens, as well as being constitutive of the main political parties (see Means 1976, 1991). The meanings of "race" (usually rendered as *bangsa* or *keturunan* in Malay) in successive colonial censuses, or in popular understandings in Malaysia today, have involved a complex and unstable mix of factors encompassing place of origin, descent, "nationality," culture, religion, and language, combined

with the pragmatic objectives of governance.<sup>22</sup> The special position of Malays or Bumiputera (literally, “sons of the soil,” and including some indigenous groups of Sabah and Sarawak) was enshrined in the constitution and thus rendered the position of non-Malays contingent.<sup>23</sup> The historical embeddedness of the “race paradigm” in Malaysia, as well as its centrality to economic policies under Prime Minister Mahathir Mohamad and his successors, and its entanglement with religion and politics, has made it particularly recalcitrant (Milner and Ting 2014; Shamsul 1998, 2001). Separation rather than confluences of political, religious, and economic life, instituted under colonial governance, has remained a dominant mode of governmentality. The history of Penang with its lively Jawi Peranakan and Straits Chinese cosmopolitan cultures (among others) is by these lights anomalous. Malay language and culture and Islam, this last seen as inseparable from Malay identity, have increasingly seemed (especially to many non-Malays) to exercise a hegemony over the existence of all Malaysian citizens.<sup>24</sup>

Since the 1950s, and particularly since the 1970s, the school educational system has become less diverse; teaching in public schools has occurred in the national language (Bahasa Malaysia) or, for some private schools, in English, Mandarin, or Tamil (Tan 2002; 2009, 21–22). The effects of educational policies, which favor Malay students and limit entry to universities for non-Malays,<sup>25</sup> impacted directly on the hospital staff whom I encountered and are discussed in chapter 2.

Penang is the only state in the Federation of Malaysia in which, historically, Malays have not constituted the majority of the population. A table in the 2010 census gave the total population of the state as 1,561,383, divided ethnically as shown in table 1.

To some extent, these distinctions map onto religious affiliations. Malays, who make up the large majority of the “Bumiputera” category, are (by definition) Muslim, while other groups have more diverse religious affiliations. The census category “Other Bumiputera” refers to non-Muslim indigenous groups that are Christian or animist. Table 4.10 of the 2010 census showed total population by ethnic group and religion for each state. In the state of Penang, most of the ethnic Chinese population was classed in the 2010 census as Buddhist (532,811 or 79.5 percent), with a minority of “Confucian, Taoist and Tribal/folk, other traditional Chinese religion” (70,237 or 10.5 percent) and Christian (59,096 or 8.8 percent). Most of the ethnic Indians were

TABLE 1. Ethnic composition of Penang, 2010

| ETHNIC CATEGORY        | NUMBER  |
|------------------------|---------|
| Total Bumiputera       | 642,286 |
| Malay                  | 636,146 |
| Other Bumiputera       | 6,140   |
| Chinese                | 670,400 |
| Indian                 | 153,472 |
| Others                 | 5,365   |
| Non-Malaysian Citizens | 89,860  |

Source: *Population and Housing Census of Malaysia*, Department of Statistics, Malaysia 2011, 42 (table 2.10).

shown as Hindu (125,564 or 81.8 percent), with a minority of Muslims (12,335 or 8.0 percent) and Christians (10,774 or 7.0 percent) (*Population and Housing Census of Malaysia*, Department of Statistics, Malaysia 2011, 91).

Perhaps not surprisingly, given its demographic history, Penang has a tradition of political opposition to the ruling coalition that has formed the government since independence in 1957—first in the form of the Alliance comprising UMNO (the United Malays National Organisation), the MCA (Malayan Chinese Association, later Malaysian Chinese Association), and the MIC (Malayan Indian Congress, later Malaysian Indian Congress); and then, after 1969, when it was joined by Gerakan (the Malaysian People’s Movement Party) and became the Barisan Nasional (National Front). From 1957 to 1966 George Town voters elected a Socialist Front coalition made up of the Labour Party and Partai Ra’ayat (later Parti Rakyat) to lead

the local council. The state government of Penang was won by opposition parties in the general elections of 1969, 2008, and 2013. The results of the 2008 elections, in which the ruling Barisan Nasional lost its two-thirds majority in Parliament for the first time, constituted a major political upheaval in Malaysia and are discussed further in the section preceding chapter 3.

Economically, the development of an electronics manufacturing industry fueled growth in the 1980s and 1990s and led to the establishment and rapid expansion of new suburban areas and satellite towns and the opening of the first Penang Bridge in 1985, along with a second in 2014, linking the island by road to the mainland. The population is highly urbanized, with an urbanization rate of 90.8 percent recorded in the 2010 census (Yeoh 2014a, 249). A well-developed beach area to the northwest of the island in Batu Ferringhi, heritage sites in George Town, and the varied and high-quality cuisine for which Penang is justly famous (and in which locals take a strong interest) all contribute to the attractions that have long made the tourist industry an important part of Penang's economy. Medical tourism, although not a focus of my research, is a growing economic sector and is part of a "regional circuit" of historical connections that links Penang with Indonesia, particularly Sumatra (Whittaker, Chee, and Por 2017; see also Chee, Whittaker, and Por 2017). The island of Penang has one large public hospital, usually known as GH (General Hospital), as well as a smaller one, and at the time of my research, eight private hospitals of different sizes catering to both the local population and foreign medical tourists. Several of these were founded by religious organizations or Chinese charities.

Penang has for many decades had a lively civil society sector representing different interests, including the Consumers Association of Penang (CAP), the Penang Heritage Trust, the Women's Centre for Change, sustainable development groups, and the nonpartisan multiethnic political reform group, Aliran. Some of these groups also combine to take political initiatives under umbrella groups such as the Penang Forum. The Penang Heritage Trust was a major contributor to George Town's attainment of UNESCO World Heritage Site status together with Melaka in 2008. Unsurprisingly, rapid economic development, population growth, and transformation of the built environment have led to tensions and contestations between property development and heritage conservation (see Goh 2002; Jenkins 2008).

Penang's distinctiveness in Malaysia and the development of its trading economy, emphasized here, are clearly part of a long historical process going back to the late eighteenth century. Historians have recently begun the important work of excavating the cultural flows in different eras of the port cities of the Indian Ocean (see S. Amrith 2013; Ho 2006; Lewis 2016). Jean DeBernardi's (2004, 2006) outstanding anthropological accounts of Chinese identity formation and popular religion provide an in-depth and historically situated understanding of Chinese culture in Penang. Although the history of Penang is particular, cultural diversity is a hallmark of wider Malaysia too, especially of its urban centers, including Kuala Lumpur (see, for example, Yeoh 2014c). In the urban hinterland of Penang, on the west coast of the mainland, Donald Nonini (2015) has given a rich historical depiction of the intersection of Chinese ethnic culture and class formation, focusing on Chinese truck drivers and their bosses in the town of Bukit Mertajam. Not only do ethnicized (often racialized) identities in the form of the ubiquitous categories "Malay," "Chinese," "Indian," and "Other" thoroughly permeate many aspects of Malaysian life (see Holst 2012; chapters 1 and 2, this volume), but each category also obscures its own heterogeneous basis—as many of the aforementioned studies show. Even "Malay," a designation strongly associated with local origins, national identity, and political dominance, has been shown to rest on a history of regional demographic mobility and diversity partially obscured by strong incorporative tendencies.<sup>26</sup>

The complexities of cultural diversity and the separations that have been enshrined in governmentality since the colonial era have fostered an anthropology of Malaysia with a strong tendency to examine each of the main ethnic groups separately through their local, cultural, religious, or political institutions (see Yeoh 2018). My own study of Malay kinship in Langkawi (Carsten 1997) might be a case in point. This can have the effect of reproducing the already essentialized ethnic categories of government and media rhetoric as analytic frame. Nor is such ethnicization restricted to social science. Pertinently for this study, in nearby Singapore with its similar colonial and trading history, Aihwa Ong (2016, 62) has shown how an "ethnic heuristic" pervades and frames genetic research into cancer. Despite the presumed separations of ethnic difference, a corollary of the rapid urbanization, industrialization, and economic growth in Malaysia since the 1970s

is that many citizens are in daily contact with “other Malaysians” of “other ethnicities” (see Kahn 2006, 154–57). This is probably especially true in contemporary urban workplaces, which are in many cases multicultural spaces. Such daily familiarity may have contributed to recent election results, which show urban voters willing to cross ethnic lines, as well as engagement in the recent movements for political reform, Reformasi, and anticorruption, Bersih. In chapter 4, I show how, although cultural practices such as postnatal prohibitions, food consumption, or ideas about ghosts are in some respects ethnically specific, they are also readily translatable between cultures. In situating much of this book in workplaces such as hospitals, blood banks, and blood donation drives, I have attempted to avoid assumptions based on an already prefigured version of what ethnicity is or how it is constituted in Malaysia. Placing ethnicity in the background, I suggest, might be a different way to reveal its contours and to see how and why it matters.

### Fieldwork

The main part of the research on which this book is based took place on the island of Penang between January and July 2008; this was complemented by short visits in 2005, 2006, 2007, 2009, 2010, 2012, and 2015. The earlier visits were exploratory and were used to set up the research and find locations for fieldwork; the later ones, after I had begun writing, were to probe findings from the work carried out in 2008 and to test out initial analytical hunches. The fieldwork was based mainly but not exclusively in two medium-sized private hospitals in Penang. I have not revealed the identities of the hospitals or staff members to protect their confidentiality. While this is a necessary protocol for research, it also occludes important information. Clearly, the history of particular hospitals—their geographic location, size, the kinds of patients and population they serve in terms of class, ethnicity, and nationality, their charitable or otherwise status—matters for the processes described in this book. I did not conduct research in Penang’s large public hospital, although I did visit the blood bank there. The selection of hospitals in urban Penang was partly a matter of the relative ease of acquiring research permission in different institutions, but it also resulted from my sense that, because of its size, large numbers of patients, and the pressures on staff, the public hospital would present considerable difficulties for research. The hospitals

where I worked were smaller and more easy to navigate. Staff members could usually find time to talk to me. The patients who were treated in these hospitals were fairly mixed in terms of background—comprising middle- and working-class local Penangites of different ethnicities as well as some regional medical tourists, including from Indonesia and the Philippines.

Following the advice of senior doctors through whom I negotiated access, I settled initially on the clinical pathology labs as my central focus. As described in the following chapters, these labs not only ran all the diagnostic tests on blood and other bodily samples requested by doctors for hospital inpatients and outpatients; they also managed the hospital blood banks within the same spatial locations and were responsible for screening donated blood, separating it into components, and storing it. They participated in blood donation events outside the hospital, collecting blood from donors at these campaigns as well as from those who came to give blood at the hospital.

The majority of staff members of the labs were medical lab technologists, but staff also included lab technicians, phlebotomists, clerical staff, receptionists, cleaners, dispatch staff, and the lab managers. In addition, nurses, engineers, sales reps from medical technology firms, and others from inside and outside the hospital were regular visitors to these spaces. Part of the training of medical lab technologists involves periods of work placement. When groups of trainees undertook training in the labs where I was carrying out research, I discovered that their presence initiated all kinds of opportunities for discussion between them and the more senior medical lab technologists, and with myself, about the nature of their work and how it is learned, but also more generally about learning to be a responsible person and the entanglements of work, ethics, kinship, different medical systems, and other matters that this entails.

I spent much of my time in the labs, but I also accompanied lab staff or went by myself to blood donation drives located in different parts of Penang in factories, shopping malls, community halls, hospitals, and Buddhist associations. I visited hospitals and clinics outside the two hospitals that were the main focus of my research, and I spent some weeks in a dialysis center in one hospital. I accompanied medical lab technologists and phlebotomists when they went on ward rounds to collect blood samples from patients, and in general I tried to get a rounded sense of the work and lives of these enactors of “blood work” in Penang. While I was able to participate

in the social life of the labs, and was remarkably free to observe the work processes that went on in these spaces and to ask questions about them, I did not directly engage in this work—so this study is based on “participant observation” of a limited kind.

The *lingua franca* of the hospitals was English, and this was the main language used in the research—though sometimes my knowledge of Malay (Bahasa Malaysia) was helpful. Beyond English and Malay, hospital staff often used other languages, especially Hokkien and Mandarin, in their communications with each other and with patients. Staff members were almost all extremely fluent in English, and many were bilingual or trilingual. The speech reproduced in the following chapters is as noted down at the time or in the following few moments. I have tried to convey the cadences, locutions, and rhythms of everyday spoken Malaysian English, which characteristically has a staccato pattern and uses direct forms and fast repartee. In this version of “Global English,” pronouns, some obvious verbs, and markers of tense are often omitted. These expressive speech patterns—which might be considered a dialect or “brogue,” following Marina Warner’s (2016) apt usage—are markers of identity, as Warner notes, and provide a vivid entry into the worlds of experience described here.<sup>27</sup>

Staff members were unfailingly helpful, patient, and kind in answering my many questions and tolerating my presence. I spoke also to many blood donors in the hospitals or at other donation sites, and to patients when this did not seem to be an untoward intrusion. In addition to observing and talking about their work tasks as they were carrying them out or soon after, and engaging in informal conversations about their families and lives outside work, I conducted a set of interviews with members of lab staff to learn in more detail about their social and family backgrounds, education, and career trajectories. Toward the end of my time in Penang, I presented initial findings to lab staff and to doctors at the hospitals where I conducted the research and received extremely useful feedback.

Complementing fieldwork, I kept a file of newspaper clippings that touched on themes connected to research on blood: stories about blood or organ donation, about particular hospitals, or about medical matters more generally. As time went on, the topics of these stories became gradually more diverse as I followed the threads of conversations with blood donors, medical lab technologists, university lecturers, doctors, patients, reception-

ists, and the occasional proverbial taxi driver. I became aware of the ways that not only stories about blood but also wider social and political events more generally suffused these discussions and touched the lives of those to whom I spoke.

In drawing on newspaper accounts to analyze new modes of imagined criminality that emerged in Suharto's New Order Indonesia, James Siegel uses such reports to depict "the formation of a mental framework that is imposed, although in my opinion not explicitly, by one class upon another" (1998, 116). As he makes clear, the insights gained in this way emerge not by reading the newspapers alone but through his long ethnographic engagement with Indonesia. Siegel's methodological note (1998, 116–19) is pertinent. Newspaper reports are a means to access social processes not in isolation but in conjunction with the understandings gained through fieldwork (see also Gupta 1995, 377). Similarly here, such accounts are a form of public discourse that provide insights into issues, idioms, and resonances that have wide currency in Malaysia through the ethnographic work that they complement. The newspaper I have relied on most heavily is *The Star*, an English-language paper with a wide circulation in Malaysia and a historical association with Penang, from where its northern edition is published.<sup>28</sup> *The Star* has a broad appeal across different contexts in Malaysia; together with several Chinese-language papers, it was widely read in the hospitals and blood donation sites that I visited in Penang.

### The Ebb and Flow of Chapters

The preceding discussion makes clear that this is a book about multiple interconnectedness. In the process of writing, divisions of subject matter between chapters and the directions of flow of the argument have sometimes seemed arbitrary—one might choose different beginnings or stopping points. The main ethnographic chapters focus on the details of blood donation, blood banks, and life in the clinical pathology labs. They perhaps offer a somewhat narrow ethnographic lens on Malaysia. How does this connect to dominant themes in Malaysian public life at the time of fieldwork? Each of these four ethnographic chapters is preceded by a short section drawn from newspaper accounts that explores the "public life of blood," as well as the relationship between the newspaper accounts and the enclosed world of

the labs and blood banks, at the time of my research. In what ways did blood manifest itself in public discourses in Malaysia? How might such appearances resonate with work processes in the clinical pathology labs or blood banks? These sections convey the wider context of public life and events in Penang and Malaysia during the period of my research. Without affording a privileged access to the truth, newspaper accounts provide a different lens through which to calibrate the material in the ethnographic chapters.<sup>29</sup> They complement and broaden themes in the ethnography. What were the main issues reported in the media at this time? What were people talking about “on the street” in Penang—or at blood donation campaigns and in the blood banks and clinical pathology labs, while waiting to donate blood, during the lulls in the routine procedures of work, or over snacks, lunch, or coffee with colleagues? In describing these public events and concerns, I make connections between the seemingly rather self-contained world of the hospital labs where blood is tested, screened, and analyzed, and the wider social and political universe in which these labs exist.

Medical lab technologists, lab technicians, receptionists, lab managers, and nurses (as well as donors and patients) are directly and indirectly informed by publicity about blood donation, health scares, stories about organ donation, or hospitals that appear in the media, and by the ways these are picked up by members of the public who are also potential blood donors. And of course, as citizens, they also have multiple interests in the social and political events of Malaysian life that are carried in the local and national press. Quite by chance, as I have indicated, the period in which I conducted research in Malaysia turned out to be more politically eventful than anticipated. In the run-up to the general election of March 2008, and in the period immediately following, there was constant and lively discussion in the newspapers and more broadly about the possibility of fundamental changes to the Malaysian political scene. Wherever people met and talked, these matters were discussed with animation and interest.

At center stage were the tumultuous political events of 2008 briefly alluded to above and drawn out in the section preceding chapter 3. They included the electoral campaigns and general elections of March 2008, in which the coalition of government parties suffered a loss of electoral support but retained parliamentary power. In the aftermath, the leader of the opposition coalition, Anwar Ibrahim, was arrested and, in a bizarre reprise

of events ten years earlier, during the premiership of Dr. Mahathir Mohamad, accused of sodomy (see Trowell 2015). The issue of Anwar's blood sample assumed, as we have seen, an iconic significance in these events in media reports, which also illuminates the myriad connections between blood as biomedical object and blood as a substance replete with kinship, ethnic, religious, and moral significance. In media accounts it seemed that this particular blood sample was used to question not only Anwar's moral status but also the legitimacy of political opposition to the government. But this usage appeared to have the potential to be turned back on itself and to undermine the legitimacy of the government that had set these tactics in play. The "uncontainability" of the different meanings of blood—its propensity to exceed the limits of any particular domain in which it occurs—illuminates particularly clearly the connections between such disparate fields as morality, the body, political legitimacy, and scientific testing. We can also trace such connections in the public rhetoric surrounding blood and organ donation in Malaysia. Through an examination of the terms of these morally charged discourses, we see how such topics have the potential to travel to the sites of scientific testing—into the workspaces of hospital clinical pathology labs.

In the main ethnographic chapters, my tactic has been to "follow the blood." Chapter 1 focuses on blood donors and processes of donating, and connects this to the public rhetoric surrounding blood and organ donation. The locations where blood may be donated are described, and the motivations of donors are depicted through different donor stories. Here ideas about health, kinship ties, and memories of kinship are revealed as salient. The donor booklet has particular significance as an artifact that encapsulates a donor's life story. Acts of blood donation involve categorization, and the forms completed by donors constitute another kind of crucial artifact that permits further acts of classification. The donor form classifies donors according to age, gender, and ethnicity, but the relation between what is stated on the form and the donor thus categorized is not always straightforward. The forms record donors as "voluntary," "replacement," or "autologous" and as "regular" or "first-time." These classifications are important to the pathways on which blood travels in the lab. The distinction between voluntary and replacement donors reveals a tension surrounding the nonmonetary payment and gifts that voluntary donors receive in return for their blood. The prob-

lematic status of blood and its capacity to reveal or generate moral properties is further illuminated by the difficulties that ensue when some donors are rejected by blood bank staff as unsuitable for donation.

Chapter 2 introduces the workspaces and the staff of the labs and blood banks. The spaces are depicted in terms of the apparently clear boundaries that demarcate them within the hospitals and in terms of the divisions of space that underlie work processes. But we also begin to discern the ambiguities of these spaces, where boundaries are at best provisional, and which are at once alien and unfamiliar but carry traces of domesticity. The discussion then focuses on medical lab technologists and the particular niche they occupy in terms of educational backgrounds, training, and work. Staff members' age, gender, education, class, and ethnicity, with its strong religious associations, are set against broader features of contemporary urban Malaysia and examined in terms of how they reflect social mobility over the last few decades. Different personality types that are particularly drawn to laboratory work are discussed. But the usefulness of such typologies can also be queried—and this is partly because of the apparently contradictory demands of this work, which encompass both technical tasks and sociability, aspects pursued further in chapters 3 and 4.

What happens to blood when it enters the lab and blood bank? The analysis in chapter 3 shifts to the work that goes on in the labs and to processes of categorization and diagnosis. I describe how “objective” blood and blood products are created through the screening and testing of blood and its separation into blood products. The label is introduced as a crucial artifact that ensures the safety and reliability of processes of testing, screening, and cross-matching. The objective appearance of the sample in its labeled test tube may, however, be undermined by resonances of social relations that travel between lab staff and the products they analyze. Here I draw on Annemarie Mol's (1998, 2002) discussion of “multiple” and “unstable” objects to probe the nature of the sample and the way ethics and politics are enfolded into laboratory work. One important facet of medical lab technologists' work is the collection of blood from donors, outpatients, and patients in the hospital wards. This initiates a space for interaction between donors and those who collect blood. How this space is traversed and the kinds of interaction that ensue suggest further ambiguities and tensions over what is involved in these exchanges. Issues of contamination and contagion and

the risks and dangers of the workplace are discussed. I use the notion of “rehumanization” to depict some of the ways in which social expectations and obligations seep into laboratory life. This includes how medical lab technologists actively track individual cases or samples that arouse their interest or that derive from people they know or to whom they are related, and in so doing may improve the quality of work. Patients may sometimes be colleagues and also relatives, and this crucially affects the nature of the workplace. Further, learning and training in the lab are revealed to be highly social rather than merely technocratic endeavors. The discussion illuminates the seepages and pathways for different kinds of social knowledge to travel with samples or donated blood as they make their way around the lab.

Chapter 4 depicts the sociality of the labs through the lives and relationships of those who work there. As one medical lab technologist put it to me, “Work is just a small part of the job,” and in this chapter we encounter some surprising and unorthodox presences in laboratory life. Eating, which is not permitted in the working spaces, is one paradoxical focus of the sociality of the labs. Kinship and marriage have an equally surprising presence and can be understood in part as a temporal extension of the commensal relations of work. The notion of “domestication” captures the way these processes mitigate the alien and risky aspects of work and the spatial ambiguities of the clinical pathology labs. Ideas about health and illness, including postnatal confinement and prohibitions, in which blood is crucial, reveal some unexpected dissonances between different kinds of knowledge available to medical lab technologists. Lab staff often treat themselves using traditional Chinese, Ayurvedic, and other non-Western kinds of medicine. Religious experience and ethical engagement are also important dimensions of medical lab technologists’ lives and are described through lab workers’ obligations and commitments outside the hospital. Finally, we turn to the disputed and much-discussed presence of ghosts in the lab and to the question of what this reveals about the risks and dangers of these workspaces and their fragile boundaries.

In the conclusion, I return to the general and particular salience of this study, drawing together the various themes of the chapters to show how efforts to separate “socially embedded” from “objective” blood are both intrinsic to the work of the lab and also inherently unstable, constantly threatening to unravel. This is partly because they are enacted by social actors

who are embedded in multiple locations and relations within and outside the lab. It is also because the collection of blood in fact relies on the effectiveness of rhetoric about ethical sharing and helping others, or saving a life, through which blood donation is encouraged (as described in chapter 1). And these interconnections are further amplified through the wider political salience of such rhetoric. Blood's participation in many domains and its importance as a medium of communication between them mean that boundaries are difficult to maintain—as the disputed presence of ghosts in the lab eloquently signifies. At the same time, routine checks and controls over work tasks limit the porosity of such boundaries and the potentially devastating consequences of compromising the safety of blood products and of lab and blood bank procedures.

Finally, the discussion returns to the wider issues raised in this introduction about the nature of blood. Many of the ethnographic details presented in this study are specific to Malaysian sociality or political life, but their significance is broader. Neither the aptitude of blood for metaphoric extension nor the importance of safeguarding blood products and ensuring the accuracy of testing and diagnosis are restricted to the Malaysian context. The patient in the operating room on a heart-lung machine, depicted at the start of this chapter, whose blood has been moved beyond the body is, as Dr. Ho noted, “in limbo”—neither alive nor dead. The exceptional properties of blood, including its animating potential and its tendency to flow between domains and temporalities, accruing, sedimenting, and transferring resonances, have implications both for its symbolic power and for its status as a biomedical object. Blood's unusual propensity to be “naturalized in more than one world,” one starting point for this intellectual journey, means that it may, literally, be uncontainable.

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In their introduction to a collection of critical essays on the place of kinship in modernity, Susan McKinnon and Fenella Cannell (2013) argue that the separation between kinship and other aspects of social life—economics, politics, the realm of science, the workplace—should be understood as part of the ideology of modernity rather than its lived reality. They are critical of the “crypto-progressivism” of Michel Foucault ([1978] 1979, 1985, 1991) and scholars influenced by him whose focus on regimens of governmentality

assumes that kinship has been displaced from institutions of liberal modernity by “biopower” and “biological citizenship” (McKinnon and Cannell 2013, 35).<sup>30</sup> Their nuanced discussion builds on earlier feminist scholarship on processes of naturalization in gender and kinship and on the assumptions and effects of the separation of anthropological subject matter into distinct analytic domains, such as gender, kinship, politics, and economics (see Yanagisako and Delaney 1995).

McKinnon and Cannell suggest that a long-overdue project is to subject the role of kinship *within* self-consciously modern institutions and processes to proper scrutiny. In their edited collection, twenty-first-century transnational silk firms in Italy and China (Yanagisako 2013), outsourced shipyards in India (Bear 2013), and Argentinean petroleum production (Shever 2013) are revealed to have kinship enfolded within the very core of the productive relations of contemporary capitalism, but these are often heavily obscured and mainly hidden from view. In the more historical essays in their volume, however, we can discern the processes through which kinship and the political economy are teased apart—for example, in the anxieties surrounding the growth of Mormonism in late nineteenth-century North America (Cannell 2013).

In a poignant case central to the origins of kinship studies in anthropology, Gillian Feeley-Harnik (2013) excavates the Lewis Henry Morgan papers at the University of Rochester, in upstate New York, to show how Morgan’s own research trajectory was intimately entangled with his family life. She reveals that the dedication that Morgan originally wrote for *Systems of Consanguinity and Affinity of the Human Family* (Morgan 1871) to his two young daughters—who had died within a month of each other from scarlet fever in 1862 while Morgan was on a field trip to the American West—was removed by Joseph Henry, secretary of the Smithsonian Institution, as “unscientific.” Morgan had described *Systems* as “equally their contribution . . . to the Science of the Families of Mankind” (Morgan Papers Box 12:2, p. 7, cited in Feeley-Harnik 2013, 180). Feeley-Harnik notes, “Lewis saved the drafts of his dedication and his sketches for the crypt and his daughter’s sarcophagi [at Rochester’s Mount Hope cemetery] with his manuscript of *Systems* and other papers, and he willed them with money for the education of women to the University of Rochester, where they can still be found” (2013, 180).

The anxiety to separate Morgan's "scientific" work from his personal connections, Feeley-Harnik argues, came at a particular historical juncture. It was one expression of a larger, self-consciously modernizing endeavor to separate different kinds of humanity, and newly emerging forms of labor and property arrangements, including slavery and its abolition. New forms of personhood went hand in hand with the spatial reorganization of northeastern American cities, including Rochester, into separate residential and business districts with new parks and cemeteries. These "moral-political-economic processes," she suggests, were part of the "inseparable" development of kinship and capitalism in late nineteenth-century America (Feeley-Harnik 2013, 212). Feeley-Harnik's attentiveness to such myriad and simultaneous spatial, economic, intellectual, familial, and emotional fault lines alerts us to how these are together the outcome of underlying historical developments.

The work of "domaining," which is part of the performance and ideology of modernity (McKinnon and Cannell 2013; Yanagisako and Delaney 1995), runs counter to an ongoing process of connection that constitutes sociality, and which occurs in idioms of commensality, kinship, religion, ethnicity, or nationhood—or a mixture of any of these. Blood is one medium of connection that places these supposedly separate domains in mutual communication. And this is why observing blood work in Penang—where, side by side and in constant traffic with each other, we find idioms of science and family, truth and food, professional life and everyday joking—offers possibilities for elucidating domaining and naturalization in a new light.

But beyond this, the ethnography in this book shows what the highly routinized, impersonal, and often uninspiring work of the labs and the medical demand for donated blood require to be well performed. The tasks of donation, sample collection, testing, monitoring, screening, labeling, and cross-matching, in their minute exactitude, rely on the active and continued engagement of those who perform them. Purification, in the Latourian sense, does not in any straightforward way ensure the quality of blood work. It is in the moments of slippage when we perceive echoes of ghosts, food, kinship, memory, and care in the labs that this becomes most clear. Rather than being purified out, the apparently inimical elements of blood work—the banter, food, religion, discussions of marriage, race, lotteries, scandals,

and ghosts—turn out to be part of the vital lifeblood of these ultramodern spaces and paragons of modernity, the hospital clinical pathology labs.

Blood in this book thus stands for the messy, sticky, and binding social glue that is necessary to make modern institutions such as hospitals, blood donation centers, labs, or science work well. It both elucidates the myth of domaining under modernity and shows its tangential relevance to the version that is Malaysia's particular modernization project.<sup>31</sup> The multifaceted and plural meanings of blood indeed encapsulate the “mystery,” alluded to by Kuriyama (2002) and captured in the vignette at the beginning of this introduction, of what separates the living and the dead. This is what is expressed when lab staff articulate its ambiguously animated status and its unique truth-bearing qualities. Social scientists too, I suggest, can learn from blood's capacity to reveal interconnections between actors, sites, terrains of knowledge, and discourses that sometimes give the illusory appearance of being strictly separated.

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## NOTES

### INTRODUCTION

- 1 Kuriyama shows how the divergent traditions of classical Greek and ancient Chinese medicine both traced vitality to blood and breath (see Kuriyama 2002, 192; see also Francis 2015, 72–73).
- 2 See Carsten 2011, 2013; Foucault (1978) 1979; Fraser and Valentine 2006; Laqueur 1999.
- 3 On contemporary expressions of these Chinese notions, see also Adams, Erwin, and Le 2010; Erwin 2006.
- 4 See, for example, Anagnost 2006; Baud 2011; Chaveau 2011; Erwin 2006; Feldman and Bayer 1999; Laqueur 1999; Rabinow 1999; Shao 2006; Shao and Scoggin 2009; Starr 1998.
- 5 See Copeman 2009c; Seeman 1999, 2010; Strong 2009; Valentine 2005.
- 6 See also Adams, Erwin, and Le 2010; Barad 2003; Carsten 2013; Copeman 2013; Hoek 2014; Mumtaz and Levay 2014; Ong 2010b.
- 7 See also Anidjar 2014, xii; Hoek 2014, 32; Latour 1993; Miller 2005.
- 8 See Banerjee 2014; Carsten 2013; Copeman 2009b, 2013, 2014; Hoek 2014.
- 9 Laura Bear's (2014) attentiveness to the heterochrony or multiplicity of modern time as a focus of inquiry and to the layered and sometimes conflicting representations of time it enfolds is pertinent here. Christopher Pinney has posed the question: "What if, instead of assuming that objects and culture are sutured together in national time-space, we start looking for all those objects and images whose evidence appears to be 'deceptive' and whose time does not appear to be 'our' time?" (Pinney 2005, 262–63). Further explorations of the way that non-human entities may create temporalities, or participate in their creation—such as those advanced by Georgina Born (2015) for music and Christopher Pinney (2005) for photographic images—seem called for.
- 10 Newspaper accounts of these events are analyzed more fully in the section preceding chapter 4 (see also Trowell 2015). For an account of Anwar Ibrahim's complex political biography, see Allers 2013.

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- 11 I am not suggesting that bodily matter is the only means by which ties between political rulers and their followers are created or legitimized, or that blood is the only bodily substance that has this kind of symbolic power—bones, for example, are another apparently potent form of bodily matter—as is clear from the discussion of funerary rituals above.
- 12 For an examination of the importance of “motion,” “transportability,” or “locomotive sociality” (Bautista 2012a, viii–ix) as a component of the spiritual potency of material objects in plural religious contexts in Southeast Asia, see the essays in Bautista (2012b). A suggestive case from Malaysia is the holy water of the pilgrimage shrine of St. Anne’s Church in Bukit Mertajam discussed by Yeoh (2012).
- 13 On the entanglements of blood, race, kinship, and heredity, see also Foucault (1978) 1979, 147–50; Porqueres i Gené 2007; Stoler 1992, 1997; Wade 1993, 2002, 2007; Williams 1995.
- 14 For India, see Copeman 2004, 2005, 2008, 2009a, 2009b, 2009c, 2013. On wider south Asia, see Copeman 2014; Simpson 2004, 2009, 2011. For Brazil, see Sanabria 2009; on China, see Adams, Erwin, and Le 2010; on Papua New Guinea, see Street 2009; and for Israel, see Seeman 2010.
- 15 See Carsten 2013; Copeman 2009b, 2009c; Hugh-Jones 2011. For a discussion of the parallels between blood and organ donation see also Carsten 2011, and for a broader consideration of substance see Carsten 2004; Copeman 2014.
- 16 See also Banerjee 2014; Hoek 2014, 32.
- 17 See Anidjar 2014 for a penetrating exploration of blood as “a critique of Christianity.” Blood, Anidjar argues, “is the *element* of Christianity, its voluminous mark (citation, context). It is the way in which and upon which Christianity made its mark. More broadly, a consideration of what blood reflects, produces and sustains, what it engenders, must take—as one adopts—the form of a critique of Christianity” (Anidjar 2014, ix, emphasis in original; see also 26). Christianity, for Anidjar, is an exceptional case: “it is for Christianity and for Christianity only that blood becomes a privileged figure for parts and wholes, a figure for a collective of collectives” (2014, 256). The apparent naturalness of blood is produced in Christianity (2014, 256–58). As will be clear, I take in some respects a wider, but also a more ethnographically specific, approach to the question “what is blood?”—one not confined to a particular religion. This should not of course be equated to having a universalist position on the nature of blood.
- 18 See Lewis 2016, ch. 4; Lubis 2009, 172–73; Roff 1994.
- 19 See Khoo 1972; Turnbull 2009; Yeoh et al. 2009.
- 20 See DeBernardi 2004, 84; Mahani Musa 1999; Tan 2009, 14–15.
- 21 See Bayly and Harper 2005, 2007; Harper 1999.

- 22 See Hirschmann 1986, 1987; Holst 2012; Manickam 2015, 98–111; Milner 2011; Milner and Ting 2014; Shamsul 1996; Shamsul and Athi 2014.
- 23 See DeBernardi 2004, ch. 5, for an account of the impact of “ethnic nationalism” on Chinese Malaysians in Penang.
- 24 The changing relations between the state and Islam in Malaysia, and Islam’s increasing importance in legal matters that may affect non-Muslims too, have been discussed by Malaysian social scientists; see, for example, Maznah Mohamad 2010, 2013; Zawawi Ibrahim and Ahmad Fauzi Abdul Hamid 2017.
- 25 See Brown 2007; Lee 2014; Neville 1998; Selvaratnam 1988.
- 26 See Carsten 1995a, 1997; Kahn 2006; Milner 2011; E. C. Thompson 2003, 2007.
- 27 Warner’s (2016) brilliant essay traces the connections (among others) between brogues as footwear and speech patterns. She uses the term “brogue” as “a native tongue in the crucial sense that a language is a particular kind of music, not only a sign system on the page or a structure of grammar. It is also a tune, a pattern of sounds and intonation.” The sound pattern is in fact what identifies a brogue, Warner argues, and, unlike accents, which denote a second language, they are often characteristic of bilingual or trilingual experience. “You can be at home in a brogue, you can live in it—a sleek and comfortable pair of slippers. . . . A brogue evokes lilt and cadence and pitch and the melodic undulations of speech.”
- 28 Founded in 1971, *The Star* was originally a regional newspaper based in Penang; it went into national circulation in 1976. Under Malaysia’s stringent publication laws, its license was revoked in 1987 as part of a government crackdown (“Operation Lalang”), and it was permitted to publish again in 1988. But “since 1988 it has never regained its previous ‘liberal flavour’” (Hilley 2001, 120). However, it is sometimes regarded as less closely associated with government than its main English-language rival (with a lower circulation), the *New Straits Times*. *The Star*’s circulation is among the highest in Malaysia at approximately 250,000, with a further 100,000 for its online edition. It is owned by the Malaysian Chinese Association, a political party that is part of the ruling Barisan Nasional coalition (see Hilley 2001, 119–29; [https://en.wikipedia.org/wiki/The\\_Star\\_\(Malaysia\)](https://en.wikipedia.org/wiki/The_Star_(Malaysia)), accessed August 5, 2016).
- 29 See also Gupta, who writes, “Obviously, perceiving them [newspapers] as having a privileged relation to the truth of social life is naive; they have much to offer us, however, when seen as a major discursive form through which daily life is narrativized and collectivities imagined” (1995, 385).
- 30 See also Bear 2013; Cannell 2013; Lambek 2013; Rose and Novas 2005.
- 31 I am extremely grateful to an anonymous reviewer for suggesting some of the formulations in the above two paragraphs.