In chapter 5, we described a series of tensions evident in the informed consent process and how doctors *qua* researchers managed these in an effort to realize research not simply as a biomedical advance but as a project linked to local material and conceptual development. Here we examine a further set of tensions that emerge in the conduct of clinical trials in settings where there is little by way of custom or practice to draw upon. We describe how in the Joint Pain Trial questions emerged concerning the normative dictates of research practice and the imperatives of medical care in the Sri Lankan setting.

As in the previous chapter, we show how ethical engagement emerges out of the research encounter rather simply being a set of values that are fed into it. The tension we set out to explore is captured well by one of the investigators who, when reflecting on the way that the notion of randomization is presented to participants, saw a problem, namely that all principles of scientific research needed to be conveyed first in order to put randomization in perspective. For him, the problem had two aspects. On the one hand, he
described a gap in science literacy among the potential participants; to get
them to perform as forensic, autonomous decision makers and to ensure that
they did not mistake the trial for routine treatment and care, he had to ex-
plain about comparison and control in great detail. In other words, he had
to make clear to them that randomization might mean they do not get to
receive the experimental compound at all. He suggested that there was some-
thing profoundly novel about the way in which the experimental procedure
and the modes of knowledge in which it is nested was configured in the lo-
cal context.

As we will demonstrate, this researcher’s insight proved to be telling re-
garding the ways in which clinical trials become embedded in the local con-
text. As with the reflection of the idea of the human subject in the previous
chapter, when we consider the standard tools of the trial—randomization,
blinding, and recruitment—at the level of practice rather than prescription,
the important role of initiative and creativity on the part of those running the
trial becomes evident. First, however, we must look at what it was that the
researchers were trying to accomplish.

Clinical Trials as a Gold Standard

Biomedical science derives much of its analytical and empirical power from
the claims that are made regarding its universality. Irrespective of where the
techniques and procedures for scientific experimentation are enacted, the
facts that they yield should be essentially the same at any time, in any place.
However, for this to be the case, much effort must go into the work of ho-
mogenization. Statistical categories, terminology, language, scales, measures,
standards, and properties all have to be calibrated, demonstrated, and put into
practice in order that they might become “immutable mobiles” of the kind
Bruno Latour (1987) has elaborated upon—that is, things that might bring
change without being changed in themselves. Without this work of standard-
ization, the experimentation upon which development in biomedical sci-
ence depends will not travel; even if it did, it would produce results that
were neither valid nor transferable. So “when experiments travel,” to use
Adriana Petryna’s phrase, a good deal of preparation must be done to locate
biomedical research within the global scientific episteme (Petryna 2007a,
2007b, 2009). Typically, a large-scale clinical trial funnels standardized data
from diverse settings into analyses that produce results that aspire to methodological plausibility and statistical robustness. Findings take on the character and currency of aggregated evidence, on the basis of which sound generalizations might be made.

The gold standard for clinical trials is the randomized controlled trial (RCT), in which subjects are allocated to different treatment groups under carefully monitored conditions so that the effects and efficacy might be evaluated (Timmermans and Berg 2003). Immutability and increasing mobility are guaranteed through ever more scrupulous adherence to the rules and procedures for clinical trials laid out in documents such as the International Conference on Harmonization Good Clinical Practice Guidelines (ICH-GCP). Evidence that these guidelines have been followed faithfully guarantees recognition and acceptance of the results by the wider scientific public, including drug regulatory bodies, academic peers, and journal audiences. Crucially, however, the demonstrable capacity to index local practice to global standards is for the consideration of national bodies such as the U.S. Food and Drug Administration (FDA), which grant licenses for new pharmaceutical products allowing companies to enter lucrative international markets.

The neatness of the RCT model and its claims to epistemic authority have been brought into question by a number of researchers interested in the processes rather than in the products of human experimentation (Cambrosio et al. 2006; Helgesson 2010; McGoey, Reiss, and Wahlberg 2011; Moreira and Will 2010). Here, the interest is in the mutability of mobiles rather than their apparent immutability. Paying attention to process rather than product reveals the modifications, negotiations, creative acts, and interpretations that underpin the successful accomplishment of a trial and how the “universalising rhetoric” of science operates in practice (Jasanoff 2005, 15). To borrow an analogy from Latour, those who are conducting clinical trials are not mere placeholders in the mobile (Latour 2005); rather, they are actors who follow scripts but also interpret and improvise their parts, drawing on a multiplicity of experiences, objects, and persons that are presented as unified, comprehensive experimental paradigms (Knorr-Cetina 1999).

With the arrival of clinical trials into new contexts, a key element is the tension that surrounds the new rules and practices that must be learned and the familiar routines that, as a consequence, must be put to one side. The disunity is not only based on technical abilities and competencies but also involves assimilation of different ways of thinking about how to read
information from the bodies that find their way into the trial and how to act upon that information (cf. Adams et al. 2005). In conducting a trial, there are necessarily shifts in ideas about causality, induction, inference, and evidence as these typically operate in biomedical practice. There is no single specific tradition of thought nor one group of authoritative specialists; instead there is a kaleidoscope of hybrid forms, each with its distinctive character, that represent significant points of perturbation, negotiation, and accommodation in an otherwise smooth world of multisite clinical trials.

In drawing attention to “epistemic virtues,” Lorraine Daston and Peter Galison (2007) highlight how persons who take on the role of knowers in these worlds are connected to the knowledge they produce, not only as practical orchestrators but also as its moral authors. Yet at the same time they must also strive to create knowledge in which the marks of the knower have been erased—that is, they aspire to gain “knowledge unmarked by prejudice or skill, fantasy or judgement, wishing or striving” (Daston and Galison 2007, 17; also see Zabusky 2000). Considering this apparent contradiction—between presence and nonpresence, seeing and not seeing, intervening and not intervening—requires us to engage not only with the products of science but with the social fields and cultural repertoires that inform the practices of scientists.

But how does research become marked with the “social” in a setting in which there is no established tradition of biomedical research by big pharmaceutical companies but rather one in which trialing and other large-scale science collaborations are only just beginning to take shape? This observation prompts a second question: in the work that is done to achieve universal standards in clinical practice and bioethical oversight, is there a single and shared conception of the social in play? As the previous chapters have suggested, the bringing together of scientific endeavors across large discrepancies of wealth and development suggests a number of warm themes: networks might be extended, knowledge passed on, good scientific practice disseminated, innovative synergies improved, a culture of technological dependence mitigated, subject protection improved, exploitation challenged, and so forth. With the arrival of RCTs, however, cool themes also arise, notably the ease with which collaboration and bioethics might help mask exploitation in settings that are resource-poor and inadequately regulated (these are discussed in more detail in chapter 8).
We suggest that as collaborations are forged, there is not merely a more socially inflected, interdisciplinary, multiauthored “mode 2” science taking place of the kind mapped out by Michael Gibbons and colleagues (Gibbons et al. 1994; Nowotny, Scott, and Gibbons 2001) but a more complex engagement between experimental practice and culture that might be better characterized as science practiced in mode 2^n, where the n counts for the multiplicity of negotiations that need to take place at the different sites in which the work of standardization is undertaken.

As described in chapter 2, the Joint Pain Trial, which was funded by a pharmaceutical company, was an early attempt by Sri Lankan doctors and scientists to participate in the global laboratory that RCTs have ushered in. To figure in this laboratory, it is essential that local practices meet global standards, and that this can be demonstrated, supported, and, most importantly, evidenced and audited. Like some landing strip for a latter-day cargo cult, the conditions for successful reception of this new form of wealth creation had to be built in anticipation. Glossed as yet another form of capacity building, these activities include significant recruitment and training of personnel. This includes clinical research assistants (CRAs), trial managers, statisticians, and data managers as well as the formation of ethics review committees, the establishment of monitoring procedures, and the assembly of rooms, computers, and virtual networks that comprise the paraphernalia of the multicenter trial. Without this capacity, the benefits of future economic, intellectual, and social capital will not flow.

Within these networks, the RCT figures as a very powerful regime of knowledge making. The rigorous objectivity and detachment needed for the conduct of a large multisite RCT is capable of prizing apart other modes of connection that must be engaged with and rendered irrelevant to the pursuit of credible scientific evidence. As collaborators within this epistemic community, we were able to document the process of knowledge production and aspects of this reconfiguration: breaking connections, rupturing relationships, instilling a sense of detachment where before there might have been connection, relationships, and attachment as well as creating a complex assemblage in which existing systems, practices, relations, assumptions, and beliefs are transfigured to render the body an object of pure quantification. A mode of detachment that is inherent in the method of RCTs is introduced that operates on this messy reality and in so doing illuminates and thereby
makes available for examination and modification practices that were previously likely to have been tacit. The crux of the argument we develop here is that in moving toward this detachment, aspects of existing medical and scientific practices must be disciplined and displaced. Erasing the knower from what it is that is eventually known is premised on the existence of certain kinds of knowers who must be trained and instructed not just in what to know, but how to know it; detachment of the social is necessarily preceded by the socialization of detachment. But what exactly are the practices that these novel forms of rationality discipline and displace?

To situate the findings, we remind readers of the Sri Lankan medical system which can be said to be a largely “craft”-oriented form of practice and one in which the full impact of an evidence-based medicine paradigm has not yet fully penetrated. As Stefan Timmermans and Marc Berg (2003) would have it, this is a system characterized by a “disciplinary” rather than a “mechanical” objectivity. Medical students encounter an authoritative approach in medical education and practice, with their relationships with established physicians marked by strong vertical hierarchies based on status, knowledge, charisma, and reputation. Relationships are marked by intellectual and professional patronage; they often follow lines of kinship, religion, class, and occasionally caste. Inasmuch as they are vertical, they are likely to be based on membership of a particular medical cohort or what might otherwise be thought of as the “batchmate” phenomenon. The steep power gradients that separate junior medical staff from their superiors manifest in a good deal of fear, concern to avoid offence, and a tendency to replicate rather than challenge received wisdom among the former. To fall afoul of a powerful senior is to risk long-lasting damage to reputation and future prospects, which are for many the primary pull of a career in medicine. The teacher’s position in the hierarchy is in part based on managed ignorance—he or she keeps people in their place by determining what it is they get to know or are prevented from knowing (Dilley 2010; McGoey 2012).

When introducing RCTs into hospitals and clinics, one must engage with this existing “field of practice,” to use Timothy Ingold’s term (2001, 114; also see Bourdieu 1993). This is one that is marked by a developing rather than a developed research culture, in which there is an emphasis on medicine as healing, where relationships are highly stratified, and power differentials are vertical. In this encounter, a series of challenges emerge. These concern ambiguities regarding the roles and responsibilities in the conduct of a trial and
include the place of professional experience in epistemology, the hierarchical
distribution of knowledge, the nature of expert authority, the management
of ignorance, the place of evidence-based medicine in a craft tradition, and
ultimately the relationship between care and research in biomedical encoun-
ters (Davis, Hull, and Grady 2002; Mueller 1997).

In the sections that follow, we describe how, in the conduct of the Joint
Pain Trial, the cultivation of detachment became central. We discuss how
randomization, blinding, and responsibility for clinical decision making
landed in a context where seeing, caring, and healing by the doctors prevailed.
We conclude with a discussion about the kinds of changes RCTs bring to
existing ideas of authority and expertise.

On Blindness and Vision in Biomedical Research in Sri Lanka

Once patients had been appropriately inducted into the Joint Pain Trial and
their consent recorded, the next stage was the administering of drugs.
Pharmacists prepared the experimental compounds that were supplied by
the overseas trial sponsor, placing them in white boxes that had random-
ized number codes on them.

The story that we are about to relate took place on the day before the first
participants were to be given either Compound X (the trial drug) or the pla-
celebo. In preparing to administer them to the research subjects, one of the
research assistants noticed that something was wrong. The team of research
assistants huddled together and studied the envelopes and the refrigerator
where the drugs were kept, attempting to figure out what had gone wrong.
They read over and over the randomization instructions that told them to
match each kit number to the numbers found in the envelopes. Eventually
they realized that they did not have the kit number to match the random-
ization numbers; instead they had been given information about which dose—
active or placebo—each patient would be given. In effect, they had been “un-
blinded.” This was a code break, and thus a protocol violation.

They went to talk to the senior researcher who was managing the trial.
Lots of phone calls ensued, documents were written, forms were signed, and
an anxious shifting of weight from one foot to another was noticeable among
the assembled team as they considered what to do. They eventually concluded
that they knew which doses patients 9 and 15 were going to receive. They
reasoned that even if the remaining trial volunteers were going to be blinded according to plan, they could not unknow what these two participants were going to receive. As this extract from Salla’s notes reveals, the senior researcher took charge of the crisis:

They will have to randomize the whole thing again. “Call the patients and give them some excuse not to come tomorrow.” He changed to Sinhala giving instructions. “We have to inform the patients, we have to contact these patients before tomorrow.” In English, he continued, “At least now we know, we have got the experience.” He picked up the phone to call [to the overseas sponsor], saying out loud . . . [as reassurance to the assembled group] . . . “It was not our fault. Not our fault, we were sent the wrong envelopes.” Someone in the overseas headquarters picks up: “Hi, XX here. Listen, a small issue. You sent us the wrong envelopes. We have been unblinded, you need to re-randomize everything . . . Right, okay . . . I’ll talk to you again in the evening.” Addressing the group: “We will start next Monday instead.”

At one level, the vignette describes an everyday episode in the course of a collective technical endeavor: a problem arises and is solved. The unintended deviation from what was planned has been diagnosed, the hierarchies are activated, the solutions are formulated, the judgments are made, and actions are taken—thus, the crisis passes. Likewise, the response to the crisis would not be much different in a laboratory or hospital ward anywhere in the world. At another level, however, the vignette gives an important insight into the distinctive work that goes into stabilizing the process of knowledge production in the Sri Lankan context and the importance of strategic ignorance (McGoey 2012). To explain this event, we will explore some local notions of vision and what these reveal about proximity and detachment.

The notion of blinding is central to the methodology of the clinical trial. Indeed, a representative of the pharmaceutical company emphasized this at every point: “Unblinding must be avoided at any cost!” Blinding is intended to avoid any possibility that those who are conducting the trial have any knowledge of which patient is getting what treatment to eliminate the possibility of bias on the part of the researchers as well as the patients. In keeping with the requirements of ICH-GCP, the documentation, including the patient information sheets for the trial, are translated into local languages. In this case, the languages are Sinhala and Tamil. The idea of double-
blinding is hardly a straightforward concept in English, and it might itself require translation from the English of the clinical trial manual to an English that is more familiar to the layperson whose consent is to be rendered more “informed.” The translation of double-blinding into Sinhala is little different. Put before a native Sinhala speaker with experience of translating documents from English into Sinhala, it was clear that many terms in the manual were not in common parlance nor easily grasped—they comprised neologisms, hybrid terms, and borrowings from English.

It is not our intention here to revisit a well-documented challenge in rendering science accessible across chasms of literacy of one kind or another. What is of note at this point is the glimpse that the act of translation gives us into some deeper epistemological issues surrounding the ways in which knowledge and its creation are perceived in different language worlds and how those worlds reflect the standardization performed in introducing RCTs into Sri Lanka.

We studied the contents of the consent forms and participant information sheets, translating and back translating them. In Sinhala, the term for blinding that was used in the participant information sheets and consent form was *ubhayā drśya neḥēṣumey*—literally “double (both) vision negated.” Interestingly, local medical translators did not use the colloquial word for blinding as the removal of sight (*andha karana*); rather, the usage here refers to negated vision. Although connections between the idea of vision and the status of evidence are found in many different cultural contexts (Bloch 2008), consideration of the idea of vision negated, as distinct from the state of blindness, is subtle but important in a society in which vision and eyes carry a distinctive symbolic and metaphorical load. Vision in many South Asian traditions links to knowledge, realization, enlightenment, and indeed to animation and life itself—the Sanskrit root *drś* means not only to see but to behold, to visit, to learn, and to investigate. Someone who is enlightened would be someone who is educated, wise, and can “see.” Blindness, on the other hand, can be a derogatory term that carries connotations of ignorance and darkness. In this sense, the vision that normally informs experimental research procedure meets an intention to prevent or impair it. Vision, something that is fundamentally important to human experience, is consciously uncoupled from its groundings in curiosity and empirical understanding. In the name of scientific rigor, blinding would render the doctor passively subordinate to scientific procedure, or at worst, uneducated, whereas negating
vision implies an active impairment of a faculty that is otherwise seen as critical to medical procedures and experientially based knowledge. Instead, the Sinhala translation suggests an informed decision to look elsewhere for a moment.

The practice of “blinding” and randomization reveals a new kind of intentional unknowing, a mechanical or regulatory objectivity that had to be inculcated among the junior doctors dealing with the trial patients (Cam-brosio et al. 2006; Timmermans and Berg 2003). Objectivity and the guarantee of scientific validity are achieved by eliminating certain kinds of relationships between the junior doctors and their patients; they are cut off from knowledge of which patients get the active dose or the placebo. Those who conduct the analysis of the data have no contact with the patients—they just compile the data. As far as RCT methodology goes, the researchers are ciphers in the conduct of the trial. Doctors who might otherwise follow their disposition as healers—that is, imitate the resourceful ingenuity of their teachers and invest emotional energy in the outcome of their interventions—must now practice a new kind of detachment. They are no longer operating in craft-mode but are recast as mechanical and meticulous monitors of the body and its functions.

The particular kind of detachment that is advocated here is primarily in conflict with the relationship that a doctor would normally have with a patient, the therapeutic relationship in which he or she would expect to exercise active decision making in the patient’s interest. Especially in the absence of diagnostic devices or advanced technology, doctors typically have to decipher what the presenting problem may be by use of their intuition, experience, and logic, all of which are overruled by the epistemic requirements of the trial. The comment of the senior researcher made in the previous chapter is once again apt. The detached, blinded, conduct of clinical trials will result in “further distancing the doctors from the patients” and undermine the bond of trust between the patient and the doctor.

The clinical trials encounter results in an inversion of the power and trust relations that are expected in a medical context. Trust is replaced by a role in which the doctor is blinded: they are intentionally put in a position where they cannot influence who gets what drug. In the prevailing paternalistic relationship, doctors are expected to be dominant; the detachment that comes with blinding and consenting have the potential to undermine the mutual understandings of how a good doctor and a good patient
should act toward one another. Eliminating one modality of attachment—to the patient as a person, to the idea of relief, and to the role of knowing intervenor—is intended to amplify others. Doctors become monitors of human subjects tuned to observe the precise impacts and “adverse events” of a drug that they may or may not have administered. Although the doctors now are detached, the Sinhala translation of blinding maintains that they are not ignorant or incompetent—they have simply had their vision averted.

The arrival of the RCTs introduced new modes of detachment not only into clinical relations with patients but also into relations among the medics themselves. Randomization, blinding, and responsibility for clinical decision making have been introduced into a context where men and women wearing white coats and carrying stethoscopes are associated with seeing, caring, and healing. These practices may have been tacit, but nonetheless they had to be challenged in order to produce the kind of data needed to meet pharmaceutical regulatory standards. The existing epistemic authorities and expertise were thus brought into question.

Changing Forms of Authority and Expertise

According to international standards, conducting a trial that had been unblinded would have constituted mismanagement and could have had a wide range of professional and economic consequences for everybody involved. As such, the episode reveals a series of dislocations that are interesting when set against the hierarchies that usually operate in medical settings.

Two things are of note. First, the junior doctors pointed out the error and brought it to the attention of the senior doctor; in the existing nonresearch clinical settings this would have been tantamount to a breach in etiquette. Second, the authority that was ultimately invoked came not only from outside the laboratory but outside the country—from the external monitors who instructed the team on the minutiae of data collection and the disembodied voice of the trial sponsor on another continent. Both these observations point to ways in which the novel rationalities that come with these trials unsettle the existing hierarchies and roles. The new forms of disconnection open up possibilities for challenge and critique that are not typically part of the relationship between juniors and seniors. The RCTs challenge the familiar, rigid,
and carefully observed medical hierarchies, replacing them with one that is novel, diffuse, and emergent.

The contract research organization (CRO) monitor explained that his role was to report to the pharmaceutical company, although his organization was independent from them. Independent monitoring is required for trials that are aiming for licenses in international drug markets. In effect, the mediating role of the CRO—positioned between the trialists and the sponsor—is a lucrative insertion in the clinical trials assemblage. The CRO that was monitoring the trial in Sri Lanka had international offices in Australia, India, and New Zealand and had over 100 research sites across the world. For this particular trial the assigned monitor had a chemistry degree and was also enrolled for a PhD funded by the CRO. He visited the Sri Lankan site about once every two weeks, and he went over the conduct of the trial in considerable detail with the staff.

The CRO’s role, as he saw it, was “to make sure that sites identify the correct patients, ensure the safety of the patients, and deal with ethical issues or matters of confidentiality.” He had no contact with the patients but went over their paperwork—that is, he reviewed the patient case records and the informed consent forms to ensure that they were signed. He also checked that the patients were given appropriate time to decide and had had the details of their involvement explained to them. As he made clear, he was there to cross check and double-check the patient files relating to trial participation. If he found errors in a random sample of case reports, he would look deeper and try to identify whether the flaws were systematic, intentional, or unintended.

The monitor played a fundamental role in directing and correcting the trialists to ensure that the protocol was implemented in the same way across all sites. It was clear that staff were unfamiliar with and were occasionally annoyed by the CRO’s attention to detail and the frequency of his questions. Things that were not normally documented had to be recorded according to the dictum “not documented equals not done.” From the CRO’s perspective, if test results, examinations, or the minutest of adverse reactions and observations were not recorded in writing then dated and signed, it was the same as if they had never happened. As he commented, “monitoring is not just about creating rules for the sake of rules according to guidelines but these are real questions regarding real patients.” Interestingly, he also pointed out that there are no guidelines for monitoring, which seemed to be the only part
in the standardized clinical research process that was not externally regulated and governed. This represented a loophole through which the inexorable involution of audit procedures might unfold in the quest for ever more perfect standardization. The insertion of the CRO into the clinical trials assemblage was thus not only lucrative but carried significant power when it came to disciplining local practices.

This level of detailed adherence to ICH-GCP guidelines was a new experience for the team in Sri Lanka, and they were surprised by higher levels of stringency compared with what they were used to in clinical research and practice. And these expectations ran through the entire process—from the pharmacists to the junior doctors up to the senior management. Observing one of the pharmacists preparing the drugs, Salla noted how carefully she did it, as if with respect: she put on her gloves, disinfected everything with alcohol, took a small box out of the cool box, shook the box ten times, removed four bottles from it, drew the content of each bottle into large syringes, then shook each syringe ten times. The content was then injected using a smaller needle. In between each action, she disinfected the workspace. Afterward, she put the needles into a disinfected plastic bag, then into a cold bag to be taken to the wards by a courier.

On the occasion that Salla walked along with the drugs to the hospital, the courier was the information technology technician for the group. At the hospital, one of the CRAs was talking to a patient—explaining the trial again while preparing to administer the drug and collecting medical history and further data. The doctor repeated that this was a phase 2 trial, and that the drug’s safety was still under investigation. The junior doctors/CRAs were in charge of data collection from the patients, and they oversaw the injection of the trial drugs by nurses. With stopwatch precision, the junior doctors timed their questions for the participant. The junior doctors involved in the trial all said that keeping pace with the schedule of the protocol and the paperwork was the heaviest and most time-consuming part of their workload, and there was clearly a lot of it.

The importance of instilling the discipline of meticulous recording was expressed by junior and senior doctors alike. One senior researcher pointed out that everything had to be done according to the ICH-GCP guidelines:

They want all information collected meticulously. So much detail! Sometimes what happens is that I work from 8 a.m. to 10 p.m. [with non-trial patients]
and sometimes I get tired and I cut corners and take symptoms according to what patients say rather than testing: “Doctor my shoulders hurt,” and I’ll just note it down. Here you can’t do that. You have to test everything, and you can’t use Tipp-Ex [correction fluid] with anything. Everything has to be recorded. Everything has to be watched very carefully. I changed my practice accordingly.

Another senior researcher pointed to the need to pay attention to detail and surpassing judgment about what detail was relevant:

GCP guidelines and their conduct was a new experience for me. Expectations had to be met with great attention to detail. Tons of documentation. They want it to be adhered to so carefully. Actually, it was very good. I didn’t know if they were interested in something, whether it was trivial or not. Like when we were doing some blood samples after dosing, blood had to be taken every five minutes after. It is a protocol deviation if you didn’t take it exactly at that time, and if you don’t, then you have to inform the ethics committee.

This latter comment was revealing as to how the authority on what was “relevant” had been devolved.

In monitoring the work, a representative of the pharmaceutical company said that he had found some minor flaws in the way that the trial was performed. He thought that the local team was generally well-qualified for this kind of work, but he was concerned with minor faults in the documentation and with discrepancies in the dates and times—which were not seen as the fault of any particular coordinator but had arisen because they were doing things “for the first time.” The point here, however, is not just the increased rigor in clinical conduct and audit but the doctors’ responses to the expected paperwork, which reveal how the RCT changed the nature of what they were seeing in the process of gathering evidence.

The representative of the pharmaceutical company highlighted the tension further, when speaking about the trial team:

My duty is to follow the process, and I came here to guide these people, and this is said with all respect, these guys are great. There were a few things that needed talking over, and I preferred to talk things face to face. So I came to talk about [a] few things that were of major concern. It might feel like “oh my god,” but then you remind yourself that these people are doing a trial for
the first time and they can be simply discussed through. Some little things
that needed guidance that helping through will improve.

Last time I came, I went through the files, and I noticed that there were
hardly any adverse events reported. Reporting them is important, and report-
ing everything that the patients are telling so that the risk-benefit ratio is
met. So in order to collect safety and efficacy data, I saw that hardly any ad-
verse events were reported. That’s very unlikely. If that’s the case, you have a
wonder drug! So you doubt that. Like normally in a period of four to six weeks
you would have a number of little coughs and colds, some little things, you
might cut your finger, whatever. All of those have to be reported as adverse
events even if they don’t seem immediately to be related. It could be that all of
them are cutting their fingers while cutting onions and then when you’re col-
lating the data you think, “Hmm, maybe this has to do with coordination.” So
this morning I explained that.

Normally you’d see a lot more bad things happening, and it’s hard to ex-
plain these things by e-mail or Skype or whatever, but I think it’s best to talk
about this face to face, so I hopped on the plane to come over.

The underreporting of adverse events led the company representative to spec-
ulate as to whether the doctors were making their own on-the-spot inter-
pretations of just what might constitute a significant adverse event and were
screening out much that might be of relevance.

The junior doctors who were collecting the data while working as CRAs
were, in effect, doing what all their training had directed them to do—they
were processing complex and diverse information into meaningful patterns,
and deciphering diagnoses with limited testing facilities. Yet in the trial the
intention was to suspend their diagnostic meaning making, to see all signs
as potentially relevant. The significance would come later after all the data
had been pooled, and it would be arrived at by statistical rather than experi-
ential means. For the CRAs it thus seemed as though their usual abilities as
trainee doctors were being replaced by a different set of competencies, which
were largely determined by the dictates of the protocol and were carefully
supervised by a variety of monitors, all of whom brought a different author-
ity than that of the senior doctor or physician to whom the they usually
deferred.

Old epistemic virtues and expertise thus appear to be displaced as the
doctors began to think as researchers—and patients were reconstructed as
human research subjects capable of yielding a wealth of quantifiable evidence.
From this perspective, the patient becomes a representation of sorts—a composite of measurements, readings, numbers, and other kinds of “evidence.” Thus, in the quest for standardization, other stories must necessarily be overridden or lost within the logic of the trial. Knowing intuitively or tacitly—and connecting things up too soon—was one of the very things that could place the credibility of the trial in jeopardy.

Changing Practices of Knowing

With the arrival of the RCT to Sri Lanka, the merging and clashing of existing paradigms and new practices became evident: hierarchy met diffused power structures, craft-based medical practice met evidence-based research, and the doctors’ roles as healers and providers of a utilitarian, benevolent service were overridden by the need for rigorously mechanical observers. We have presented RCTs as a distinct, powerful way of achieving a kind of “conquest of abundance” (Feyerabend 1999). Here the “tyranny of the particular” (Medawar 1967, cited in Feyerabend 1999), which must be overcome when setting up and running RCTs, is made up of existing modes of learning and practicing medicine. This includes local ideas about causality and inference in medical examination as well as the management of knowledge and ignorance in professional hierarchies. What the RCTs usher in are new ways of thinking about what is real and apparent, what counts as knowledge and opinion, what passes as objective and subjective data, and who has the capacity to make these judgments. Demonstrable induction into these ways of thinking and doing are essential if local experimentation is to have currency in the global scientific episteme of the multisite clinical trial.

What we have described are the ways in which doctors are, in a Foucauldian sense, “disciplined.” They have been trained in an allopathic medical tradition, yet they practice in a South Asian setting and must necessarily bring themselves into line with the authority evident in the protocols and guidelines. In this, they are directed by the various monitors and managers who convey instructions from worlds outside the laboratory, the institution, and indeed the country. In submitting to these new authorities, the team began to think itself out of familiar biomedical routines, connections, and hierarchies and into novel practices of disconnection and detachment.
The process was one in which a great deal of negotiation, improvisation, and “bending” was needed to create the appearance of the standardized trial. This, we have suggested, might be thought of as not merely an aspect of mode 2 knowledge production but as mode 2\(^n\), where \( n \) represents the cultural negotiations that feature as a crucial part of scientific activity in diverse country settings. However, this is not to imply that trials in Sri Lanka are in any sense run badly, deceptively, or inappropriately; rather, as we point out, in the running of any trial the “local” and the “tacit” are ever-present—and without their appropriate incorporation and management the new biomedical knowledge could not be created and put into wider circulation. More importantly, for an understanding of research as development, the material and conceptual benefits of international collaboration could not be fully realized in the local setting.

In chapter 7 we turn to a somewhat different example of the way in which the situated nature of the trial plays a part in shaping the way that bioethical considerations are worked out at the local level. We turn our attention to what happens when the mundane guidelines for the conduct of clinical trials are deployed in circumstances of extreme crisis. Under such conditions, there is of necessity a good deal of improvisation—or what we refer to as precarious ethics.