In Paris in 1875, seventeen countries, including Denmark, acceded to the Treaty of the Metre, thereby taking the first steps to ‘ensure world-wide unification of physical measurements’, so that exactly the same measurements applied in Paris and Copenhagen. More than a century later, the offspring of the Treaty, a foldable wooden ruler, was one of the most treasured tools used by a Danish architect working on the reconstruction of Frederiksgave. With the ruler in his hand the architect figured as a professional who measured, admired, touched and rebuilt the Frederiksgave buildings.

France had led the way in developing metrical standardisation, even holding the template of the metre – made from corrosion-resistant platinum – in its state archives. Like the newly invented stamps developed in Britain in 1840 for standardising the cost of global postage, the metre was a new global standard to aid travel and trade. Key to both standardised stamps and the metric system are convertibility and accuracy. By folding out a ruler along, for instance, clothes, wood or iron, it becomes possible to convert the extension of the material into an accurate, repeatable standardised number, e.g. two metres. And, as Verran has shown in great detail, numbers are particularly well-suited to both producing and transgressing scales. When it is expressed in an accurate and universally recognised number or measurement, a material is easier to sell and trade on a global market, where these standardised transformation systems are welcomed because of the efficiency and transparency that they allow. Measurement, in this mode, works to support and facilitate the trading of value.
To open up these transformation systems I need guides, and here I turn to a great thinker of translations: Bruno Latour. In an article entitled *Circulating Reference* (1999) on scientific knowledge production during a field trip to the Amazon, Latour describes how the so-called Munsell Code, one of the tools of the expedition, was used as a universal standard for arranging ‘all the nuances of all the colors of the spectrum by assigning each a number’:\(^4\) The assigned number is then, in turn, rendered understandable and the colour reproducible by all colourists in the world thanks to the Munsell Code. Latour describes one of the French scientists who participated in the field trip, standing there in the Amazon:

Lost in Roraima, made so tragically local, he is able to become, through the intermediary of his code [the Munsell code], as global as it is possible for a human being to be. The unique color of this particular soil sample becomes a (relatively) universal number […]. Though seemingly always out of reach, the threshold between local and global can now be crossed instantaneously.\(^5\)

The Munsell Code, a catalogue of rough rigid paper with small holes above each colour and code, is all it takes to make this vertiginous movement between the local and the global, provided people are familiar with the code. Again, numbers are key performers in transgressing scales and localities. For those not initiated into the universe of the Munsell Code, however, the text in the form of black strokes will remain just that: black strokes on a piece of paper, or at best numbers appearing to have been randomly assembled. In other words, the globalisation of this universal colour code can be realised only through the proper use of a particular standard; as a universal, its global outreach lies embedded, its potential waiting to be activated by the knowledgeable user. The distribution and knowledge of this universal standard is therefore vital to its global existence – and thus to its efficiency as a universal standard.

In this chapter, I will explore relations between the present-day builders of the Common Heritage Site, the Frederiksgave building and particular concepts within heritage work as they are developed through the role and function of different tools. I suggest that the abovementioned ruler, alongside other ‘scaling
technologies’ such as architectural models and geographical maps, made the construction of the Common Heritage Project possible in particular ways. Due to their accuracy, standardisation and interchangeability, the ruler, maps and models not only made possible travel from Denmark to Ghana, but also journeys between the past, present and future. In the previous chapter, I explored how the Frederiksgave project design envisioned the heritage site as a cultural encounter of common interest and universal historical value. Here I will investigate another phase of the project, and focus on the gradual physical reconstruction of the site as it materialised during my fieldwork; I thus explore the concrete production process that made the Common Heritage Site emerge. By focusing on how techniques, materials and intuition were enacted, I pay close attention to the physical emergence of 'our common heritage', culminating in the completion of the Frederiksgave Plantation and Common Heritage Site. I am interested in exploring questions such as how the notion of accuracy in reconstruction was related to ideas of authenticity, how ideas of an original or a model are at play in the design, what tools were at the reconstructors’ disposal, and how these helped them bridge the gap between then and now, here and there.

AUTHENTICITY AND APPROXIMATION: CHARTING FREDERIKSGAVE BY THE RULER

Discussions about authenticity were central to the reconstruction work at Frederiksgave, as they have been in heritage literature generally. Using accurate standardised measures attained with a ruler, a plan of what the main building at the plantation once looked like could be created, thus giving the reconstruction a certain degree of authenticity as a building as similar to the original as possible. And indeed, a great deal of energy was invested in reconstructing the site to its former design. First, the remains of the buildings were excavated by a small team of Danish and Ghanaian archaeologists. This was followed by detailed surveying and ‘construction-archaeological investigations’, as the Danish architect-in-charge called it. Fourteen Danish archives were searched, and people who had visited and photographed the site over the years were consulted. For the exhibition that was to be displayed in the main building,
a Danish historian from the University of Copenhagen, with expertise in the Danish establishments on the West African coast, was hired as a consultant to ensure that the exhibition remained consistent with the information found in the Danish archives. The National Museum of Denmark went to great lengths to make sure that the reconstruction and exhibition were in accordance with all known historical sources. In so doing, the museum was in concordance with various charters on heritage. The Venice Charter from 1964, in particular, was, as mentioned before, often referred to directly by people from the National Museum. This Charter states that:

[n]o new construction, demolition or modification which would alter the relations of mass and colour must be allowed. […] It [restoration] must stop where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp. […] All reconstruction work should however be ruled out ‘a priori’. Only anastylosis, that is to say, the reassembling of existing but dismembered parts can be permitted.\(^8\)

The emphasis in the Charter on material authenticity contained in the idea of anastylosis is clear: no introduction of new materials can be allowed. The materials and the architectural composition together form the nexus around which heritage properly evolves, according to the Charter, and this heritage construction should ideally not alter what is left, at least not without clearly differentiating between what was found and what was subsequently added or altered. All of the charters on cultural heritage (Athens Charter, 1931; Venice Charter, 1964; UNESCO Convention, 1972) mention conservation and preservation as means of safeguarding structures and places of universal value for humankind. However, increased awareness of new and different ways of securing heritage meant that, during the 1980s, a growing critique of the universalising perspective of the Convention and charters led to the formulation of ‘The Nara Document on Authenticity’. This document, drafted in 1994, problematises the narrow universalist understanding of authenticity enshrined in the former charters, by stating that it is
not possible to base judgements of values and authenticity within fixed criteria. On the contrary, the respect due to all cultures requires that heritage properties must [be] considered and judged within the cultural contexts to which they belong.9

The Nara Document allows for a wider understanding of authenticity by stating that, instead of being based on ‘fixed criteria’, values and authenticity ‘may include form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors’.10 With the Nara Document, authenticity is no longer limited to materials and architectural composition, but can equally be based on intangible forms – a principle that was further developed in the Convention for Safeguarding of the Intangible Cultural Heritage (2003). For instance, the Nara Document acknowledges Japanese ideas of authenticity based on ancient techniques handed down, rather than on specific original materials. The Nara Document thus introduces an idea of multiple understandings of authenticity.11

I never heard the Nara Document mentioned during my fieldwork, where the other international charters focused on guidelines for material reconstruction took precedence. Nonetheless, the heritage workers I engaged with talked about and practised authenticity as a paradoxical figure exploding ‘fixed criteria’; that is, as something to aspire to but also something unattainable. Searching, exploring, observing, enlarging, reinventing and refining techniques and information to ‘get as close as possible to the original’, as one person involved in the project put it, was a key theme. In this way, an ideal of authenticity still shaped the project and made the Frederiksgave site appear a genuine and serious heritage work to many of the people involved. Aspirations to authenticity were, in this way, both a premise and an ideal goal for the heritage work at the Frederiksgave site, and as such, it was not a theme I brought to the field. Discussions of authenticity were raised in a complex manner by the project participants, and the ambiguities woven into the very notion of authenticity were continually debated. A ‘working notion’ of authenticity – as both an aspiration for accuracy between original and reconstruction and as an intensive quality of reconstruction work, as copying and creating anew – emerged in the process of erecting the buildings step by step.
Critiques of authenticity as universal and pre-given have been raised forcefully by Richard Handler and Eric Gable.\textsuperscript{12} Much as I appreciate their observation that truth in heritage work is socially produced rather than found, I think there is a need to extend this finding beyond the discursive realm to the materials involved in reconstruction. In the case of Frederiksgave it is not enough to state that the aspiration for authenticity is a social construct – in particular ways at the site, it becomes an interesting material construct too. Jones has called for a view of authenticity in heritage work as a combination of materialist and constructionist approaches,\textsuperscript{13} and as we shall see in the following, there is good reason not to consider these approaches separate and discrete: the materials, tools, techniques and practices involved in remaking Frederiksgave resist such dichotomies. The real and constructed character of Frederiksgave is thus a premise for beginning to explore the ways in which the project makers engaged with authenticity, and the means by which authenticity, as a concept, participated in bringing particular enactments of a common heritage to life.

A fatigue with merely stating that life is constructed has long been the concern of many Science and Technology Studies (STS) scholars and anthropologists. Among them is Michael Taussig, whose book \textit{Mimesis and Alterity} (1993) has greatly inspired my exploration of cultural heritage in relation to the Frederiksgave project’s aspirations to authenticity. Seeing socio-material reconstruction as an opening rather than a conclusion, Taussig suggests exploring ‘the mimetic faculty’,\textsuperscript{14} i.e. ‘the nature that culture uses to create second nature, the faculty to copy, imitate, make models, explore difference, yield into and become Other’.\textsuperscript{15} Somewhat counterintuitively, the mimetic faculty is not just a matter of making exact copies – it is also a matter of othering, of exploring difference – ‘a compulsion to become the Other’.\textsuperscript{16} Inspired by J. G. Frazer’s idea of sympathetic magic, where the copy or part draws its power and character from the original or whole,\textsuperscript{17} Taussig questions the external separation between representations and what is represented, by arguing that there is a sensuous relation between the two. With its sensuousness, mimesis creates and explores difference, but not as an outward relation to the material world, not as something added on to it. Therefore, Taussig suggests, much analytical vitality can be gained from looking into the very act of mimesis:
in imitating we will find distance from the imitated and hence gain some release from the suffocating hold of ‘constructionism’ no less than the dreadfully passive view of nature it upholds.18

Whereas the distance between signifier and signified is an external arbitrary relation, the distance in mimesis is internal, through its sensuousness. In recognising the distance between the thing and the thing imitated as internal sensuousness, we can be released from constructionism and the way that it detaches us from a passive material world. In relation to the Common Heritage Project, instead of merely stating that constructions with aspirations to authenticity are taking place, we might thus ask how is it being done? What is involved in this mimetic work where the copy (the reconstruction) relates sensuously to the original? How were imitations or aspirations to authenticity accomplished in the reconstruction work? These sorts of questions also imply the potential for working with and through analysis in imagining new futures19 or, in Verran’s wording, for provoking ‘postcolonial moments’.20 In this vein Taussig impatiently asks, ‘Why don’t we start inventing?’

Taking this exhortation as my cue, I want to explore some of the tools, such as the ruler, architectural drawings and illustrations, that were involved in the reconstruction of the Frederiksgave site. These tools were more than just instruments applied externally in order to animate a dead original; the tools shaped and were shaped by the world they measured or were related to in various ways. Following Taussig, I do not want to end my analysis by simply stating that the recreation of the Frederiksgave site was actually a creation, and assuming that the materials or tools were given entities external to each other. My ambition here is to leave behind ‘a foundationist’22 way of thinking whereby the world is understood as something ‘out there’ to be reached by either relative representational signs or by universal given codes (as unpacked at length in the previous chapter). The overall point is to see my analysis as a generative and co-creative engagement with the object, offering new and qualifying perspectives on heritage. I will start this co-invention by returning to the ruler and exploring its role in the project more thoroughly.
When it was not lying unfolded on irregular rocks or wood, the ruler was always sitting in its own specially designed pocket in the working trousers of the Danish architect at the Frederiksgave reconstruction site. It was his personal possession, never to be borrowed and only to be broken (if at all) by the architect himself, as he once confided to me. As his possession, it was a part of him and his professionalism. As a sort of ‘prosthesis’ in the sense presented by Strathern, one could say that the ruler was a part of his architectural training, although there was never a complete merging between him and it. Instead, with the ruler in his hand he was transposed into a certain kind of architectural profession – a profession that was both more and less than him, and also the other way round: a man who was both more and less than a profession. The architect’s ruler was nailed together ingeniously to allow for the movement of endlessly folding and unfolding the twelve wooden parts that covered two metres when fully extended. The ruler also possessed another rare feature: it had an old Danish standard, Danish inches, inscribed on the one side, and the international metric standard on the other. Old Danish standards, the architect told me, were all based on the proportions of the Danish human body, or on agriculture at a particular point in time. But on this ruler, the old Danish standards were based on a standardised ‘Danish body’ and had apparently been used by the Danes to built forts and houses on the West African coast. The difference between the two standards – the Danish inches and the metric system – could be seen as one between dimensioning and measuring, according either to the human body or the body of the earth. Briefly described, the metric system grew out of ambitions to replace the relativised bodily measurements that had been regional standards all over Europe since the Middle Ages. Instead of the regional bodily measurements (e.g. an inch, a foot, an ell – which varied from place to place), a universal unit, the metre, based on theoretical mathematics, was developed by French mathematicians in the late eighteenth century. At some point the metre was defined as being based on the distance from the North Pole to the Equator, along the meridian of the Earth running near Dunkirk in France and Barcelona, in Spain. Geometrically it was
one ten millionth of a quadrant of the Earth’s surface – clearly a theoretical mathematical measure, founded on the physical body Earth.\textsuperscript{25}

With further technological developments, this definition of the metre has been replaced by more precise measures, such as wavelengths in a vacuum or the speed of light. Length in the metric system thus no longer refers to a body but to an interval of time.\textsuperscript{26} Interestingly, it seems as if standard measurements have followed a path that began with a template – a stable Vitruvian man – but then shifted over to an even more unchangeable and stable earth, and then onto a moving particle – a ray of light. If so, (increased) accuracy does not follow from stability but rather from movement.

Back in the village of Sesemi, with a simple gesture of the ruler in his skilled hands, the Danish architect could swap between these different measures – metres and old Danish standards. Enfolded in the architect’s treasured tool were the human body, the body of the earth and the speed of light. In this very concrete way, we might say that ‘an other’ is always present in the ruler. With regard to its non-absolutist character, the ruler can be seen as a spatial version of the rather culturally relativistic Nara Document. By avoiding any notion of \textit{the} only right way to measure by way of a universal metre, or \textit{the} only way to maintain heritage authentically through fixed criteria, they both entail an idea of movement and of an ‘other’. At the reconstruction site, it was obvious that the ruler was vital in the process of reconstruction. The Danish architect told me that by measuring with the ruler he could ‘predict’ the positions of some of the original walls, corners and steps of the ruin. Prediction might seem a peculiar term to use when it comes to reconstructing something from the past. The question of how one can predict the past points to a central and paradoxical figure in the project. Prediction in a reconstruction heritage project contains an idea of an as-yet-not-existing-former-construction to be actively created by an architect, and which at the same time appears as something that is already there and is now lying passively ready to be decoded and uncovered. In other words, with the aid of the ruler, the architect simultaneously creates the buildings as they once were and imitates them as if they were already there. The surveying done with the ruler, then, is both a matter of creation (of a new building) and
imitation (of what was once there). This paradoxical or mimetic figure of both prediction and decoding contained in the ruler was of great importance in the reconstruction work. One could say that in a dual movement the ruler is both carrying a scale to be applied (the metre scale) and scaling itself, in that it is a perspective that creates the Frederiksgave site in particular ways that live up to the standards of international heritage. It is both copy and invention.

The stock of buildings that comprised Frederiksgave was designed using the old Danish standards. During the actual reconstruction work, the Danish architect opted to convert the old Danish standards into presumably more universal units, namely centimetres, metres and the UK standard of inches, because, as he later told me, ‘that was the only thing that made sense down here’. At one point, while excavating and surveying the buildings of the former plantation, he enthusiastically explained to me the way in which he had found the ‘original’ thickness of a wall by removing the eroded material:

It was very exciting, and what made us decide that it actually was the thickness of the foot of the wall, of course because we measured it, right, because that was the most true, the most true surveying one could make down there, that was, it fitted when we measured in centimetres and then turned around the ruler. I’m always carrying a ruler that has centimetres on one side and Danish inches on the other side. Whenever we turned the ruler it clearly fitted the Danish inches, every time, no matter what we measured, lengths of holes for the windows, for the doors, thickness of external and internal walls, the pillars […]. It clearly fitted inch for inch. It was not like […] twelve and three quarter inches, it was twelve inches and fourteen inches, perfectly precise. It was a huge joy and such a delight to receive such a message from the people who once built it. Of course they measured in inches, in Danish inches and feet and ell.

Again, mimesis could be seen to be a central feature of the reconstruction work. The architect could, through the use of former Danish measuring standards, imitate the gestures of the original builders, and the ‘messages’ that the architect talked about ran along these mimetic lines. By imitating the previous builder,
probably a Danish miller named H. Grønberg, and his measuring standards, the architect could receive the messages sent to him – just as with the Munsell Code, where users have to know the code in order to use it. Only thus does a code become efficient; only then does it become a tool for mimesis. This ability to receive and understand the dispositions of the past seemed to move the architect emotionally. By imitating past builders, the ruler somehow collapsed the gap in time between then and now, acting as a sort of time machine that, by means of the enumerated inches and yards extended and inscribed on a wooden stick, took the architect back to the 1830s. By bringing a standardised ‘Danish body’ to Ghana, the ruler also collapsed the gap in space between here and there – between Ghana and Denmark. The ‘admission ticket’ or requirement for such travel in time and space is precisely this wooden stick, as well as a familiarity with length as one single stretch making up a unity of extension – a familiarity which is not a given, as Verran has shown in her description of different ways of measuring lengths in Yoruba classrooms.27 In this sense, the ruler as used by the Danish architect was not only an instrument for measuring spatial extension, but also folded up time along an extended timeline, thus connecting him to fellow Danish professionals from an earlier period. The old instrument allowed for pursuing ‘moments of bodily and temporal resonance’.

The excitement the architect expressed about precision and regularity was remarkable. He was elated by the fact that, every time, the measurements fitted clearly; they were not random, but exuded accuracy. Interestingly, it seemed that the better the imitation, i.e. the more precise and in agreement the ruler was with old Danish measurements, the shorter the gap in time appeared to be between the original Danish builders and the present-day architect. This accuracy was, on the one hand, a sign of a frictionless and compatible translation between then and now, here and there, made possible by the ruler. As such, it was an aspiration to achieve an exact copy, an imitation without difference. On the other hand, as argued above, the mimetic faculty is never without difference. So while the accuracy implied in the fact that the measurements fitted clearly every time collapses a relation between then and now, here and there – in the act of making an exact copy – the relation also seems to produce differences. An example is the ‘messages’ from the past that the Danish architect received from
the old builders: these were both similar to the knowledge of the Danish architect (they were all professionals using a specific professional tool to construct houses) and different (they were different people living in different times). The ruler, in this sense, embodies and enables travel across differences in time and space. It works like a magic wand.

**THE MAGIC OF MIMESIS: ACTS OF DISPLACEMENT**

Taussig suggests that ‘to give an example, to instantiate, to be concrete, are all examples of the magic of mimesis’ – whereby the copy gains power from the imitated. He asks ‘does not the magical power of this embodying inhere in the fact that in reading such examples we are thereby lifted out of ourselves into those images?’ To me, there is something very interesting about this ‘lifted out’ movement, and in the idea that images worked out in examples, instantiations or concretisations have the power to lift out the reader. Let us return to the architect and his beloved instrument, the ruler. By using the old Danish inches, the architect could imitate what the original builder supposedly had in mind. How might this be a case of ‘the magic of mimesis’? My point here is to argue that by way of the ruler, the architect was ‘lifted’ into a professional community of architects, sharing, among other things, precision in construction work according to recognisable standards. Like the Munsell Code, the ruler could be said to function perhaps not so much as a universal code whereby local and global can be transgressed instantaneously, but as a national code that has the ability to ‘lift’ people with the right skills ‘out’ of themselves and transgress the past (1830s) and present (2000s), and Denmark and Ghana, instantaneously.

I like to think of the movement of being lifted out of oneself as an act of displacement. Displacement, like its synonym, ‘transposing’, is a term related to ‘transformation’, which refers to the change and instability of whatever is subject to it: ‘things’ change during transformation. The architect, or what seems to be the orchestrated assemblage of architectural professionalism and experience, sensitivity, eroded soil, stone, ruler, are momentarily displaced and transformed into an old Danish builder community. By imitating, learning and
taking part in their actions and habits, the architect is reconfigured and transformed into something ‘other’. Through encounters with former colleagues and environments, the architect emerges anew – as a conservational architect with knowledge of Danish construction work close to the equator in the 1830s. The encounter might thus be seen as an instance of Tsing’s awkward engagement; the architects and assemblage of involved things are the same then as now, yet they are also not the same, and this makes the encounter something to be worked on in the here-and-now rather than through a meeting of given entities (see Chapter Two). Through mimetic gestures, the architect has participated both in the past – by using old techniques, among other things – and in the present-day reconstruction; he is transformed, and may never look at a Danish or Ghanaian official building from the beginning of the 1800s again without the experience of this particular encounter, one that now structures and transforms his mind, senses and movements. The architect’s excited curiosity about the former builder and the original site, I would suggest, can be seen as an instance of the magic of mimesis, a magic that only works when there is an acceptance of a certain way of guaranteeing authenticity – through replication.

CONVERTIBILITY OF STANDARDS: IN AWKWARD HANDS

Delight in the accuracy obtained via the ruler and the drawings it engendered was something I often came across during my fieldwork. During my years of coming to Ghana, I have accompanied several Danish architects, and I soon learned the central importance of the basic activity of measuring. The people from the Danish National Museum wanted to measure all the Danish traces that were severely threatened by decay; that was what seemed to be ‘the least we can do’ regarding the buildings once constructed by Danes along the former Gold Coast. I shared the architect’s fascination with the ruler. Often the architect in charge of the reconstruction project and I could be found folding out the ruler along our bodies, chairs or along buildings we were passing, just to compare whatever was at hand with old Danish measuring standards. Walking around a neighbourhood close to the former Danish Fort of Christiansborg in Accra, we identified old Danish-built houses by stretching out the ruler along the walls.
Most of these houses were originally built using Danish inches, feet and ell. Such ‘discoveries’ excited us both. More than 150 years ago, builders had brought their treasured instruments, along with a few other personal belongings, on ships from Denmark. Just as we were doing now, they had stretched out their rulers, first to survey the proportions of the houses, and later to build and check if the constructions were in accordance with their measurements. With great enthusiasm, we imitated these gestures by measuring houses according to these old Danish standards. Walking around with the ruler, we found and measured a particular standardised Danish body in Ghana through these old Danish standards. The mimetic gesture confirmed and substantiated our actions and reasons for being exactly where we were – in the former ‘Danish village’, as Osu, the part of Accra situated next to the former Danish main fort of Christiansborg, was once called. The ruler thus allowed for a bodily retelling, but it was also the pivotal point or the mirror in which mimesis worked. It formed a connection between a national standard of measurement and the time this standard was in use. In other words, it opened up a space for further exploration of differences and similarities – relations in both time and space.

Mimesis can confuse and blur any attempt to identify a primary cause or origin. Did the house imitate the ruler or was the ruler imitating the house? And what precisely were we imitating? At first glance, we were miming measurements: old Danish inches, showing for example, a foot as a foot. But we were also imitating the original builders’ gestures of measuring, by interweaving our more or less well-trained hands and eyes with the ruler and with the cues given by parts of present-day houses. Mimesis, then, was our way of understanding the relation between tool (the ruler) and building through measures that showed our heritage to be at once the same as then yet also different. My point here is that if one experiences the magic of mimesis then the ruler and the house are converted into each other through a series of translations; the magic is one of imitating and altering by the same gestures.

The ruler, then, both closed and maintained the gap in time between the 1830s and the 2000s, between the old standards and apparently global metric units. It also both closed and upheld the gap between Ghana and Denmark, by creating Danish-built houses in Ghana, and by taking us back to the original
Danish builders’ measuring and building practices. In all senses of the word, we were moved by the ruler. Given this fascinating capacity of the magic wand enfolded in the ruler, one might wonder why the ruler was only found in the hands of the Danish architect. The Danish architect had initially given a ruler to each worker at the site as part of ‘a training process’. However, during my fieldwork I did not see one worker using his ruler at the reconstruction site. The only person attached to the tool – as we often jokingly pointed out – was the Danish architect himself. It thus seemed as if the only people who were fascinated by the old measurements and questions of accuracy and regularity, and who joyfully immersed themselves in this kind of mimesis, were the Danish architect and other initiated Danish visitors, myself included. The rulers given to the workers were in metric units, and when I asked why nobody else involved in the project was working in Danish inches the architect replied,

Architect: No, Danish inches don’t make sense.
Nathalia: But they do in relation to the building.
Architect: No, but then I do not have any measuring tools for my people [the Ghanaian workers on the project], unfortunately they are not produced any longer, the rulers with Danish inches […]. They [the Ghanaian workers on the project] work in English inches, they all do. By the way, they mix up millimetres, feet and inches and yards and meters, and sometimes you really have to pay attention when talking about a certain length. And sometimes it can be a bit thrilling if I have to take a measurement with one of the workers, […] their hands [start] shaking because they then have to read the ruler, and it takes them a long time and then what they sometimes come up with is really wild. For instance, if it was […] eighteen meters and ten centimeters, they would say ‘one hundred and eighty one meters’, and then I would have to figure out what they meant […]. I also learned a lot from this, in that way I have also learned a lot, you know.
Nathalia: What did you learn?
Architect: A humility that one should not expect too much, but on the other hand, one should make some demands, right, and it’s always a balancing
act. By the way, it’s the same story in Denmark, but there it goes for other things, because every Danish workman can of course read a ruler or a centimeter ruler, right. But it is not, clearly not, something to be taken for granted down here, not at all, absolutely not at all.

In contrast to the Danish architect, the Ghanaian project workers did not immediately see the point of having been given a ruler. It seemed they lacked the requirements, and possibly the interest, to imitate and make the journey in time by way of the ruler. Furthermore, the potential standardisation of measures was not recognised, whereby, of course, it shows itself to be but one standard among many. Like the Munsell Code, the referentiality of the ruler becomes important and obvious when in use; indeed, that is when it becomes clear that it is a self-maintaining ‘circulating reference’.\(^{34}\) Apparently the Ghanaian workers had had no similar experiences of ‘thereness’ – for example, of experiences with small official buildings in the countryside in Denmark – that might help them travel in space. Altogether, these sorts of mimetic relations simply did not make sense to the Ghanaian workers. Instead, it seemed to make them insecure, causing them to mix up metres with millimetres and inches, feet and yards. One might say that the mimetic gesture obtained via the folding ruler did not work for them – instead it only produced differences. The humility and low expectations that the architect mentioned express the challenge he faced as the architect-in-charge of the reconstruction project in Frederiksgave. Together with a group of predominantly unskilled workers, he had to rebuild a former Danish ruin, following standards that were more or less unfamiliar to his crew of workers. Needless to say, different skills follow from different experiences of measurement. The abovementioned tension between the architect and his men arose, I suggest, when they did not agree on the similarities and differences at play in the reconstruction project. To the Danish architect, similarity was expressed as a matter of neutral translation offered by the ruler. But as the shaking hands expressed, difference was also produced. Translation is not just about a frictionless transformation of one thing into another, and neither it is just about similarities: clearly, it is also about maintaining differences.\(^{35}\) Pure similarity in translation – or in imitation, I might add – is unattainable. This is
why mimesis is the capacity to become other. The shaking hands and jokes with the ruler point to all these differences and ambiguities; but it is also all these differences that make the architect’s experience and project different from those of the Ghanaian workers. The humility that the Danish architect spoke of, the nervous shaking of hands and jokes with the ruler seem to me to manifest a set of awkward relations produced by the ruler. For all its precision, standardisation and alleged objectivity, to make use of the ruler required a whole range of mimetic gestures, of magic translations between differences and similarities, of which the actors were aware, and which turned it into a much more ambiguous artefact; the ruler paradoxically produced differences in time and space, created unease and tension, at the same time as it was meant to be producing an accurate and universal common understanding.

MODELS AND DRAWINGS: SCALING UP AND DOWN

During the reconstruction of the Common Heritage Site, the ruler also played roles other than causing hands to shake and spurring humility in a trained architect. Through processes of numerically scaling up and down, the ruler could survey the dilapidated building and transform it into models on pieces of paper. Surveying a building means recording all positions in the built material. Strings are carefully suspended between several points on the building site, making it look like a large-scale graph paper, as the Danish architect explained to me. Through a process of numerically scaling down, the enumerated lengths are then converted into an architectural drawing. The more detailed the survey, the better, the architect said. He added that when building the huge European cathedrals of the Middle Ages, the builders had made 1:1 models of parts of the constructions. At the Frederiksgave site, he had primarily used a 1:50 model, which was a scale he liked to work with when building houses. Whereas a 1:1 model made in a material other than the building materials creates a physical form to be likened to the building, the 1:50 model produces other perspectives. The forms and points of the dilapidated structures at the Frederiksgave site were transformed into scaled down versions on paper: architectural drawings.
These architectural drawings or models on paper were treasured by the
architect, who made several drawings of the group of houses at the Frederiksgave
site, of each house and of details from each house. His detailed surveying of the
ruin was turned into elegant architectural drawings of the main house as it had
once looked, while also predicting what it would look like when the reconstruc-
tion was finished. The architectural drawings were taken back and forth every
day between the site and the house where the Danish architect lived when in
Ghana. Upon arrival at the Frederiksgave site in the morning, one of the work-
ers would take three wooden stools out of the tool shed and place them around
a table in the open shed. We each had our assigned seat around the working
table because, as the Danish architect explained to me, it is important to have
routines and rituals at a work site. These rituals seemed more important to the
Danish architect than to his Ghanaian colleague and myself, who swapped
stools whenever it seemed convenient. From his vantage point in the shed, the
Danish architect could see the buildings and the way the reconstruction was
developing. The wooden stool on the left side of the table provided him with
a stable position from where he could follow the progress of the building and
compare changes (differences) between his drawings and the physical build-
ing. If making generalisations is a matter of focusing on small conjunctures and
ignoring other differences, as discussed in Chapter Two, the architect’s assigned
seat afforded him a way to momentarily carve out and cut away (all) other
perspectives in order to maintain a single one – here, accuracy was certainly
located in an exact and stable position. From this position the architect took on
the role of creator, but without abandoning his aspiration to make an accurate
copy – a reconstruction. The dual position of the architect is apparent: from
his fixed point his ‘creation’ becomes complicated by his aspiration to make an
exact copy of what was there. This is a copy with no perspectives, or just the
neutral perspective of history. To paraphrase Verran, it is simply telling things
the way they are.36

Every morning the Danish architect would place his briefcase on the table
and, depending on the programme for the day, we would look at plans, maps and
sketches. Sitting in the shade with a nice flat table as support, he would unfold
the drawings and together we would study the ground-plan of the building,
or the façade, or a detail of the building that he had made. The scaled down models on paper of, for example, a ground-plan based on the detailed surveying of the ruined building, gave us an opportunity to view the building from above, a perspective that was quite different from walking in the burning sun on the uneven ground inside or around the ruin. As Lévi-Strauss also notes in a commentary on art *qua* plastic or graphic transformations, all scale models imply that some of the object’s dimensions are lost, for example, in paintings the fullness, the smell, the tactile inputs. Humans, Lévi-Strauss argues, are inclined to perceive an object by perceiving parts of it as a way of overcoming the danger that the whole object might impose on us. With scale models it is different. The ‘reduction’ of sizing down the object in a scaled down model, and the cutting away of some of the dimensions, entails that

> Being smaller, the object as a whole seems less formidable. By being quantitatively diminished, it seems to us qualitatively simplified. More exactly, this quantitative transposition extends and diversifies our power over a homologue of the thing, and by means of it the latter can be grasped, assessed and apprehended at a glance.

Mastering the object comes, according to Lévi-Strauss, from our ability to control its size. When it comes to scale models, he argues, the perception of the total precedes the perception of the parts.

It is interesting to note that the construction drawings for the huge cathedrals of thirteenth- and fourteenth-century Europe did not ‘show anything in its totality, providing only partial views or at best particular elevations [i.e. drawings of the façades]. This lack of totalities in architectural drawings from the Middle Ages might, in Lévi-Strauss’ terms, lead us to perceive builders of that time not as artists trying to control what they saw by way of scale models of totalities, but as people trying to control the building via detailed models of parts. This could, of course, partly be due to the time span involved in these constructions, which often took centuries to complete, and therefore involved many generations of professional builders. Each builder was in charge only of what he could build; that is, a particular part of the cathedral. From another
perspective, these parts might be wholes; for instance, a whole statue, arch and/or a whole life’s work. Turnbull notes that this kind of architecture did not follow any predetermined course, and that throughout a cathedral’s development there was no masterplan, no immanent need; instead, it was an irreversible process that turned accident into necessity. In these construction processes there was no frictionless reversibility between part and whole, and scaling up and down was not a matter of numerical sizing.

The Frederiksgave reconstruction seemed to be characterised by an opposite move: accidents were avoided by plans and images of the whole – a drawn whole that was rather quickly produced after surveying the building. This seemed to follow Lévi-Strauss’ argument that the scaled down model was easier to control; the ‘whole’ could be mastered on paper, and accidents thus avoided. The reconstruction evolved bit by bit over the months, all the time relating to a whole – the buildings in their totality as figured out on paper – as it once had been. Accidents that would interfere with the copying of the whole building from then to now were eliminated as far as possible. Only through necessity and knowledge of its past form can a future form emerge and the buildings qualify as authentic cultural heritage. The complete buildings of the past, as a whole, become the goal of the future to be achieved through a meticulous knowledge of parts and the elimination of accidents in the present. Even accidents, though, had been planned for in the overall project design as contingent expenditure; they had a budget line and in the architect’s report they were mentioned as ‘delays’, covering issues such as ‘weather’, ‘shortage of materials’, ‘forgetfulness’, ‘visits’ and ‘absenteeism’. As described in Chapter One, projects appear as wholes, so by calculating delays, accidents were recorded and could in this way be controlled, making the Frederiksgave project appear as a whole – a whole that even controlled its contingencies, its uncontrollable parts. Like the climate models Tsing writes about, they ‘are made more reliable by incorporating uncertainties into the model, that is, by modelling them’ – indeed, one can control uncertainties by modelling and writing about them, and paying for them.

The drawings used in the construction of the cathedrals of the Middle Ages seem rather unsystematic to twentieth and twenty-first century professionals.
On the old drawings of architectural details are also drawn images of humans in the process of construction. In a way, their presence on the drawing, working with parts of the cathedral, stresses the performativity of constructing a cathedral – a cathedral-in-the-making. It was quite the reverse with the architectural drawings for the Frederiksgave project: on the invitation to the inauguration described and shown in the Introduction, for example, illustrations of humans are completely absent. The invitation gives a drawing of the façade with no depth, no background and no humans. Humans would disturb the intended copy of the original. The perspective, one might consider, should not be human at all, but instead reflect universal history itself, speaking through codes of pure and rigorous professionalism. Rather than stressing the performativity of reconstruction, the drawings and the sketch on the invitation stress the accuracy of professional work. The ruler was also vital in remaking the completely symmetrical ‘Empire’ construction that made up the main building at Frederiksgave. Symmetry appeared to be highly treasured by visiting Danes and people from the National Museum. Having visited the site, it seemed that we all departed with at least one picture taken from the symmetrical axis, most often a photo of the whole building, usually without people, or a photo of the entrance doors opening into a back wall where three posters were exhibited according to the symmetrical axis. These posters displayed a list found in the Royal Danish archives naming all the slaves working at the site at a particular time, flanked by two portraits of Danish Governors.

The symmetry was perfected in the illustration on the invitation card for the inauguration, and this illustration was also chosen as the front page of the accompanying booklet that was made especially for the exhibition at the site. Alongside an architectural drawing, the front page showed a two-dimensional façade of the building. No tropical trees, goats, children, workers or visitors disturbed the harmony of the construction; the main building just rose out of the white ground of cardboard. Interestingly, the people who live in the village chose to use a photo of the building from an oblique angle on the postcards that were later produced, something I will return to in Chapter Five. Similarly, a young man from the village who borrowed my camera chose to portray the building from another oblique angle, namely from the Chief’s house.
**Fig. 3.1** The front of the Frederiksgave building from the symmetrical axis, 2008, Sesemi, Ghana.

**Fig. 3.2** Symmetry inside the Frederiksgave building, 2007, Sesemi, Ghana.
**Fig. 3.3** The Frederiksgave building with the Chief’s house in the foreground, 2007, Sesemi, Ghana. Courtesy of Daniel Nii Amrah Ashikiwe.

**Fig. 3.4** Locally produced postcard sold at the Common Heritage Site, 2009, Sesemi, Ghana. Courtesy of Stanley Akoto Sasu.
It seemed that many of the Danes photographing the building, myself included, took great pleasure in (maybe even felt seduced by) the possibility of capturing an ordered totality offered by the symmetrical architecture. Just like Verran’s description of Althusser’s two Frenchmen shaking hands, the building ‘interpellated’ us to perform a small ‘ritual of recognition’ by making us take a photo of the front of the building – with its symmetrical shape it almost felt as if we were looking into a face. It was not so much a feeling of overpowering the object by capturing it in a photo, but more the pleasure of being face to face with Danish history in Ghana.

THROUGH THE LOOKING GLASS

One day, I was sitting with the Danish architect around the table at the site. We were looking at a photocopy of the only illustration ever found of the Frederiksgave plantation site, dating back to 1837. The A3 photocopy, which had been found in the Royal Danish archives, illustrated an aerial view of the area, made on the basis of old Danish decimal inches. With a thin detailed ruler in one hand and a magnifying glass in the other, the architect crouched over the paper and measured the tiny buildings illustrated on the map. His forehead was almost touching the paper; the two were only separated by the magnifying glass. Then he raised his head, adjusted his eyes to my scale, and with excitement in his eyes and voice he came up with a number. It was a number regarding the length of the small building on the map. A moment later, it was my turn to look at the drawing through the magnifying glass. I imitated the architect’s movement; suddenly the otherwise clearly delimited small square boxes had fuzzy edges, probably due to the draughtsman’s ink having been absorbed by sand sprinkled over the paper. In a way, it seemed paradoxical that this scoping in on the object allowed the architect to come up with a distinct number, when the magnifying glass simultaneously made the object much more fuzzy and hard to delimit – or, as Norbert Wise has framed it in his article, ‘Making Visible’, the telescope and microscope reveal a vast ‘optical zoo’ of new objects, from galaxies to microbes. Increasing the level of detail by highlighting the resolution does not make the object less complex, as Strathern has noted. It took a trained eye
to benefit from the accuracy provided by the magnifying glass. Precision was, quite literally, a matter of viewpoint; the perspective and the thing in view are, as argued throughout this book, created simultaneously.

Writing about the variety of methods that Alexander von Humboldt used on his expedition to South America, Wise notes that precision instruments were a means of extending the senses beyond their normal reach [...] not merely in the quantitative sense of smaller or larger but qualitatively, as extending human sensibilities to qualities of nature not previously available even to the most sensitive observer.\textsuperscript{50}

As we saw in the previous chapter, then, sensuousness is a vital part of the magic mimetic gesture of reconstructing Frederiksgave. With the magnifying glass, the ruler and the map in my hands, I was equipped with magic tools that suddenly made apparent the sensuous relation involved in map making, in making accurate illustrations and, ultimately, in reconstructing an historic building. The Danish architect explained that he was almost sure that the original draughtsman, supposedly the miller H. Grønberg, had been just as meticulous as he himself was now being with his ruler, and that Grønberg, more than 150 years ago, had scaled the tiny buildings on the drawing in the right proportions according to the vast area also mapped on the illustration. It was a source of great pleasure to the architect that it actually seemed as if the scales and proportions for the main building, with its bipartite staircase and roofed building, were accurate according to the old numbers. Assisted by the magnifying glass, this was as close as we could get to the original Frederiksgave, because we were looking at the only antique drawing of it known to exist – although, as mentioned in Chapter Two, we also experienced intimations of closeness when walking in the ruin or the other Danish traces. Interestingly, this proximity resulted both in an exact number and in fuzzy objects produced by the nature of Mr Grønberg’s quill pen. One might say that the accuracy provided by the drawing when seen through the magnifying glass was accompanied by a cotemporal inaccuracy as fuzzy objects came into view. The Frederiksgave building, then, could be displaced...
both into an exact number produced by intimate relations between the ruler, the magnifying glass and a professional eye, and also into a fuzzy entity produced by the sensuousness of Grønberg’s quill, both displacements being effected by magnification. The accurate tools used in the Frederiksgave reconstruction apparently produced a complex kind of precision that went beyond a simple referential decoding of passive matter. Curiously, the other square indications on the old illustration did not concur with the foundations of buildings found in the present-day archaeological excavations of the area. The main building was there, but not the other two buildings that had been excavated. It is possible that the other square indications on the map were some of the easily perishable ‘slave huts’ that we knew from written sources had been attached to the plantation. This discrepancy again shows that accuracy can be thought of both as absolute and relative at the same time. One could ask in what way the drawing was a model for the present reconstruction project if it displayed elements that were not there today and would not become part of the reconstructed site, and, vice versa, if buildings had been excavated that were not featured on the drawing. The architect chose to focus on and magnify what was intended to be imitated, that is, the main building. His perspective did not ‘see’ the smaller square indications and the absence of the other two buildings. What this shows is that his actions with the ruler and the magnifying glass were perspectival and creative in themselves, rather than a neutral discerning of a passive material. Neither the newly created architectural drawings nor the antique one provided a frictionless scaling up and down – in other words, zooming in and out changed the objects in question. The magnifying glass and the ruler did not so much apply externally to the site as internally create it in sensuous mimetic ways. Hence the accuracy obtained via the ruler and the magnifying glass is in itself a magic viewpoint, and both of these instruments contain their own scales and perspectives. Accuracy is not something inherent in the world, to be decoded from an external point of view, but something that can only be approximated by freezing the thing and the eye and keeping a chosen perspective constant. Reconstructing the Frederiksgave plantation was neither a matter of the material speaking precision to an audience nor of arbitrary social construction, but of actively working with the magical power of replication.
CHOICES AND REJECTIONS: MAN-MADE MODELS OF RECONSTRUCTION

Reconstruction work implies many choices along the way, choices that cannot at all be predicted in present-day drawings, regardless of whether or not these drawings are made before the building is constructed or derive from a ruin. The totality illustrated in the Frederiksgave drawings therefore had to be continuously redrawn according to the challenges encountered along the way. In the quotation above, Lévi-Strauss discusses how the miniatures are ‘man-made’, made with the hand, and therefore ‘they constitute a real experiment with it [the object]’.

The fact that the scale model is a man-made experiment makes it possible to explore the way in which it is fabricated, and to study the choices made in order to resolve certain problems encountered along the way. But as Lévi-Strauss interestingly argues:

The choice of one solution involves a modification of the result to which another solution would have led, and the observer is in effect presented with the general picture of these permutations at the same time as the particular solution offered. He is thereby transformed into an active participant without even being aware of it. Merely by contemplating it he is, as it were, put in possession of other possible forms of the same work; and in a confused way, he feels himself to be their creator with more right than the creator himself because the latter abandoned them in excluding them from his creation. And these forms are so many further perspectives opening out on to the work which has been realized.

According to Lévi-Strauss, this means that all the choices and rejections are embedded in the scale-model, in this case the architectural drawings. If this is so, then the architectural drawings become all kinds of other things in addition to accurate decodings, regardless of the fact that they are based on meticulous surveying. And, just as important, the spectator is turned into an active participant who, in a confused way, becomes the creator of the choices and rejections embedded in the work. On a general level, this confirms a very important insight,
namely the intimate and mutually constitutive relation between perspective and object. Perspectives create objects and objects entail the perspectives that they are made up of – and therefore, I might add to Lévi-Strauss’ analysis, the objects are never finite totalities – they always point beyond themselves. Instead, a particular perspective makes a totality emerge by removing other perspectives – thus the totality is a generalisation built on a small conjunction of similarities. Architectural drawings, one might say, create an axiom of unity – a common heritage site – a generalisation created and confirmed by focusing on specific particulars, while ignoring others. Another version of the circular argument implied in this theory of generalisation can now be seen: the drawings made by the architect in the present extend into the future by pointing towards what the Frederiksgave site should look like when completed; but this happens on the basis of extension into the past, revealing what the site used to look like. With a pencil stroke, the scale models conflate the distant totalities of past, present and future but, at the same time, they also separate them by containing all the choices made at any point in time to make the building look as it did and does.

Let us take a closer look at this temporal collapse. Using the ruler and the scaled down versions of the Frederiksgave buildings on architectural drawings, the architect could measure where the exact symmetrical points in the building would be. He could predict corners and openings to doors and windows, and get an idea of the house yet to be constructed, including its proportions. Measurement and reconstruction fused together in the ruler, and it became an instrument of both copy-making and creation. In one and the same movement, the ruler measured then and now, and in so doing, it showed the choices and rejections of the past and present. Even though it was not materialised, the small building drawn on the scaled down version brought us into futures yet to be realised. And, slowly but surely, the building came to look like the scaled down version we had pored over for months at the site and in offices at the National Museum in Denmark and Ghana. It was a collapse in sequences: a drawing of the house becomes the house. And, finally, in October 2007, with mimetic playfulness, from our stools around the table on the reconstruction site we could alternately look at the drawing of the façade and lift our eyes to look at a copy of the scaled down version in real time and life size.
According to Taussig, as we have seen, the mimetic faculty is not a simple matter of making exact copies; it is also a matter of playfully othering, of exploring difference. With these ideas on mimesis, Taussig jumps right into debates about the status of the sign, of the signifier and signified – which is exactly what is at stake in our discussion of the architectural drawings and the ruler. Neither satisfied with simply reducing the relation between signifier and signified to arbitrariness, as Saussure would have it, nor with the relation being naturalised, Taussig suggests exploring exactly the space in-between – a space that is marked by what he calls ‘a certain magic of the signifier’. Following Taussig, I want to explore the sensuous relations present in the Frederiksgave project as a mimetic faculty.

In our above discussion of the Munsell Code, we noted that it works only because people believe that it works, and because they value the particular authenticity it supports and legitimates (if they don’t, then the code is just black strokes on rough paper). People must invoke it to decode it, and can do both in the same movement. As we saw above, this was not necessarily the case with the two-sidedness of the ruler: it produced confusion, too. Both the Munsell Code and the ruler, then, are magic as signifiers. The same goes for the architectural drawings: they are not just depictions, but are also time machines collapsing time and space, for those who know how to navigate the space between the signifier and signified.

In a section on the effectiveness of small figurines in curing practices in Panama, Taussig writes:

Note the replicas. Note the magical, the soulful power that derives from replication. For this is where we must begin; with the magical power of replication, the image affecting what it is an image of, wherein the representation shares in or takes power from the represented.

The replicas, or in the case of Frederiksgave the architectural drawings, are more than just a copy of the represented: the Frederiksgave buildings under reconstruction in Sesemi. As we saw, the architectural drawings did indeed affect the building, there was a dual dependency between them. In fact, the
term ‘affected’ is too unidirectional, leaving ‘the other side’ passive, a position that constructionism might take in animating a dead nature. In this case, it puts the building in a passive position to be affected by the drawings, as of course it was. But the point is also, I would argue, that the building, in turn, affects (or even effects) the drawings. Thus, the way in which the drawings were used in relation to the reconstructions indicates that the building and the drawings presuppose each other, and that neat sequences in time break down accordingly; indeed, it is difficult to discern copy from original. Then and now become nested into each other, just like part and whole did in relation to the architectural drawing and the building, and as choice and rejection did in the model. When one is seen through the other in this way, it gives rise to a productive meeting that changes both. In this sense, rather than merely affecting each other, my point is that building and drawing produce each other. The drawings wedge themselves in between the ruin and the reconstructed building. They come to occupy the sensuous space in which the building is produced. In this light, the drawings emerged through a sensuous process of seeing, measuring, touching and drawing – and, likewise, the building was built, measured and seen in relation to the drawings. In other words, they conjure each other up with the help of the architect, who becomes both magician and copyist; his work is prediction and decoding in one. The drawings even exuded a sort of magical power bestowed by the represented, and indeed it felt a touch magical to sit there in the open shed, letting the eye alternate between the drawing and the building – to compare differences and similarities. The building, too, exuded a sort of magical power bestowed by the drawings, but only in this relation and from this perspective, only when this particular one was seen through this particular other – what I would call a certain and specific mimetic perspective producing magic. Even though they were also very different, in some ways building and drawing really looked like exact copies of each other or, alternatively, were equally original, the small pencil-drawn building on the two-dimensional paper and the imposing building almost rolling down the hill into my eyes. The nuances in the whitewashed colour of the building, though, depending on the position of the sun, contrasted with the mono-colour of the drawing. And instead of the beads of perspiration
and shortage of breath that hit you when walking up to the building, it was possible, comfortably and coolly, from a fixed spot, to point out specificities in the façade by looking at the drawing. The relation between the drawing and the physical building was one of similarity and otherness at the same time, and the drawings were simultaneously more and less than the building. Likewise with the building’s relation to the drawings, it was also both more and less than the imitation; they were partially connected without exhausting each other. Accurately mapping building and drawing onto one another entails magic, and enacts the architect as both constructor and imitator. If ideas of accuracy and authenticity as a way to eliminate accidents were dropped, then the creative efforts invested in carving out similarities and differences would no longer be obscured. It would then be obvious – and perhaps celebrated – that it takes more than accuracy to make the construction: it takes magic, enfolded, for example, in the ruler.

**Thought and Object: Roots Speaking to Our Senses**

Imagine the architect’s trained and vigilant eyes investigating the specificities of the lime used to paint the house in the nineteenth century as he moves close to the ruined wall, picking with his knife in order to help his eyes shape his thoughts. Are these remnants of sea shells that appear in the surface or something else? Through this sensuous moment (the orchestra of sand, shells, sea, river, eyes, thoughts, lime, knife) he is able to create a rhythm and transform what might have been messy or qualified guesses into pure data, by happily exclaiming to his fellows, ‘It’s lime made up of seashells’. In his report, written long after this sensuous moment, he can state that ‘When the Danes built on the Gold Coast they used sea shells as raw material in the production of lime and mortar’. And, depending on his knowledge of lime, the environment in West Africa and the materials available in the area at the time, coupled with the knowledge gained through a microscope or other scientific investigations conducted at the National Museum in Denmark, the content of the lime can be determined with more or less scientific specificity. There is thus a movement from the sensuous moment at the site to the exclamation: ‘It’s lime made of seashells’. In a sensuous way, it
objectifies the sensuous experience by naming it. And this movement is more than both translation and explanation: in Taussig’s words, it is ‘the peculiar power of the mimetic faculty’. Through sensuous relations of touching, smelling, seeing and listening, the architect creates an object that gains power from the orchestra of sand, lime, knife and so on, and with these sensuous movements, his thoughts are transformed. To quote Taussig, this is not a question of animating matter but a ‘question of being moved, again’; a ‘question of being touched, again’ – it is a rebirth of mimesis: ‘copy fusing with contact’.

During the reconstruction of the Frederiksgave site, all visitors, both formal and informal, were well received. If officials such as Danish ministers or people from the fund financing the project visited the site they were welcomed by the Chief of the village and his elders, who made a durba – a traditional ritual to accept the visitors and show the village’s collaborative spirit. During several of these visits, I had the chance to hear the Danish architect talk about the site and the reconstruction work. He told visitors about the work, and how he and his Ghanaian colleague had interpreted patterns of decay and had thus been able to reconstruct the site. Curiously, standing there in the burning sun, it seemed from our attentiveness that we were all so absorbed in the stories told by the enthusiastic architect that, for a moment, we almost did not feel the sweat springing from our overheated bodies. We were completely engrossed by the size of the sand grain used in the construction, the burning of the shells to produce lime, the wonderfully dense West African ‘borassus timber’, as the Danish architect named the fan-shaped palm tree, which could resist all sorts of termites and rodents. A high-ranking official visiting the site later exclaimed: ‘I never thought that lime could be so interesting’. The architect was truly a wonderful storyteller, and it seemed we were all spellbound by his narration. Indeed, we participated in the magic of mimesis; our thoughts were transformed by touching the lime, seeing the timber and listening to the architect.

For me, the highlight of the tour and the most poetic moment was when we slowly climbed the small hill and approached the western part of the building. Here, the only surviving parts of the original walls suddenly rose high above the rest of the collapsed building. The architect said that two fig trees had self-seeded in the organic matter accumulated on the flat roof. By counting the
growth rings on the trees he had been able to estimate that they were around 140 years old, and with this information he could infer that the building was abandoned to the forest shortly after the Danes left. Within a short time, cracks in the lime plaster caused by the tropical rain and heat of the day had started appearing, and the house had slowly become dilapidated. This, in turn, was an opportunity for the two self-seeded fig trees, which could then increase their growth via the organic matter, a sort of clay that was used as mortar between the stones. Drawing the nourishment and water accumulated in the clay, the trees grew and began to embrace the western part of the building. The architect thus explained that the two fig trees were both protecting and destroying the walls. Everybody in the crowd nodded, and probably imagined the huge trees that were reduced to imprints on the old recovered wall.

In the beginning, the architect told us, together with his men he was trying to figure out what was going on in the mixture of vegetation and building. Upon further exploration, they saw that some of the trees’ huge roots were peculiarly horizontal, with sudden ‘unnatural 90-degree bends’, and some had strange edges due to their attempts to find nourishment and water in the cracks or wherever possible. With an impressive sense of poetry, the architect now looked at the visitors and said that, with such unnatural forms and shapes, he knew that the trees and the roots tried to tell us something, they tried to communicate with us. But in the beginning we were stupid and deaf, not blind but deaf, we did not understand the language of the roots. It was really funny and interesting, and suddenly we said: “now it is there, the western tree is actually beginning to whisper, this root is beginning to whisper”. This was at the same time as I and my colleague […] were measuring everything, we hung plumb bobs and stated “but it fits in with the plan that the root has, it is a little bit flat on the one side, it fits precisely with the wall it hits if we hang a plumb bob” and then we knew, then we could just state that the wall really had been there. And like this we could slowly build it up and finally or later in the process we made jokes with it and said “now, now they talk” and later again “now they are actually shouting at us!”
We were all laughing, and I was probably not the only one to be completely gripped by the story of the architect learning to first just hear the roots whisper and later understand their language. Actually, these talking roots became key to the understanding and engagement of the Danish architect, and therefore
also to my understanding of the site. The story showed the double nature of the reconstruction work – a duality that is not a problem unless magic is excluded as part of the reconstruction. The reconstruction was an external decoding of the site, but it also incorporated sensuous internal relations with materials. But the architect’s story also raised new questions. Apparently, none of the crucial characteristics that helped him to hear the talking roots had anything to do with audibility. Instead, he used tools like rulers and a plumb bob, which both need the eye to interpret the measurements taken and the verticality of lines. Why did he say that, in the beginning, they were deaf but not blind? And why did he need his ears when it seemed as if it was his eyes that determined his actions and interpretations? Are there other forms of listening than phono-centrically?

Apart from simply rejecting any significance in the architect’s choice of words, saying that it was just a coincidence and that he had perhaps confused the senses, one could argue that he was engaging with particular ideas of the senses rooted in a long Western tradition, and particularly in the Cartesian division of body and mind. Here, participatory qualities are often ascribed to the ear and observational qualities to the eyes. Whereas the ear is thought to be involving, intuitive and active, the eye is reflective and analytical; it observes from a distance. This function of the eye was implicit in the previous chapter’s discussion of how surveying is an ‘anti-conquest’, understood as a non-interfering external practice of the observer. Instead of radically separating the senses from each other, though – which in this case would mean separating the audible from the visible – one could focus on their intimate relatedness. From this perspective I suggest that the Danish architect, in order to investigate the building, had to move beyond the observational and decoding function of his eyes in order to understand the roots. He had to engage with the roots by drawing the world into him in intuitive ways that the distant reflective eye could not comply with. Or, conversely, it seems to be a matter of actively submersing in the sounds in a way that a reductionist understanding of the sight could never offer. For the architect, it was not only a matter of observing or breaking up the roots, the stones and the lime into atomistic units. Instead, it was a matter of letting the material world do its bit, of alerting his intuitive sense in a way that could synthesise the whole sounding board of the building, traditionally the domain of
the ear (i.e. intensifying all his senses). The external relation between subject and object had to be given up in order for transformation to happen.

Returning to the Danish architect surveying and investigating the buildings with his ruler, we are reminded of his delight in having received ‘messages’, as he called them, from the original builders. Instead of seeing his work in individualistic terms, he emphasised its social relation that took the form of messages from the previous builder, provided and amplified by his ruler. But in the case of ‘the talking roots’ we might have to expand our notion of dialogue partners still further. The challenge of reconstructing the buildings could certainly not be the job of a lone individual – it could not even be a solely human affair. The roots, as we read in the quote above, played a vital role as engaged actors. At first they communicated in ways that were not audible and thus not understandable to the architect. He needed to engage in the sounds, to explore and measure the sources producing the sounds. And, when engaging, the ‘things’ he explored were not merely emerging and understandable to the eyes. Neither was it principally a matter of making an external assessment of form viewed from afar. Instead, he was engaged in sounds understandable to the ear, as internalised social activities (with fuzzy edges) that behaved more like prosthetic extensions than as external units to be assembled from the outside. It is worth noting that, in the quote, the architect says that the roots talked as the building was being measured. In this way, he indicates that the talking roots in some way related to the measuring, but he also chooses his words in a way that offers an understanding of a parallel process: listening to and looking at the ruler and plumb bobs. He does so in a way that makes these elements relate in some undeterminable fashion. One could say that he leaves a great amount to be decided by the ear, that is, following Ingold, to intuition and the ‘whole’ picture. The more they understand, the more ‘it fits’ together, the louder the roots talk. The job of reconstruction, then, is not just to be decided by an external survey that could be undertaken by the eye. Pressing onto our senses, the roots spurred a participatory engagement, activating more senses than one and acting in themselves as anything but the passive dead matter animated by constructionism or the technical and equally passive matter in need of no animation found in a materialist perspective. The singing roots are a case of transgressional sensuality where it might just as well be the
eye that can hear and the ear that can see. This was, however, a view that was challenged by the Ghanaian architect and his understanding of reconstructing a building, as we shall see below.

**Organic Buildings and Creative Cures**

One afternoon at the reconstruction site in Sesemi, I sat in the open shed with both the Danish and the Ghanaian architect. We were slightly tired after a long morning in the sun. Lazing on our wooden stools, we sat and digested our canned mackerel and biscuits while chatting. We were talking about their thoughts on the buildings and on the talking roots. The Ghanaian architect said that, to him, buildings were like sick patients that he had to cure. First you come up with a diagnosis, then you find possible causes, then you treat the building like a sick patient, he explained. At first, the Danish architect did not comment on this. When I asked him if that was also how he perceived buildings, he said that, for him, this was too imprecise, he was more interested in the ‘The course of damage and the images of damage’ – he wanted a more holistic approach and not merely a narrow focus on isolated elements. He then added that, in Denmark, professionals talk about ‘understanding the house’. Immediately the Ghanaian architect smiled and replied ‘a building cannot talk’ – clearly he thought that the Danish architect, whom he respected, was going too far at this point. The Danish architect answered: ‘If I go to a doctor, then he receives me holistically, he is already working even before I have told him what’s wrong. You come to a house, and you’re already working, finding solutions’. The Ghanaian architect found his colleague’s explanation far too vague and difficult to work with. Instead, he looked at me and explained that when he makes investigations he works with a certain SWOT model. Enthusiastically he took my little notebook and wrote an ‘S’, and explained that it stands for ‘Strength’; he wrote down the word. He did the same with all the letters so that the words ‘Strength’, ‘Weakness’, ‘Opportunity’, ‘Threat’ appeared in my notebook in easily readable hand writing. He then elaborated each letter: ‘the ‘S’ creates jobs for people’ – I had now got my notebook and pencil back, and under his finicky writing I added the keywords vertically in order to economise on the horizontal space. Later, when
I was interpreting my cramped vertical writing I came up with the following: ‘S: strength/create jobs for people, W: weakness/erosion, O: opportunity/more money will come, T: threat/too many tourists will put pressure on the facilities, and the felling of trees is a threat, along with erosion’. The Ghanaian architect then explained that, since a building cannot talk, you have to find the problem and recommend a cure – you give it treatment. If the trees are the cause of the problem, as the two fig trees were for the reconstruction of the Frederiksgave buildings, then you fell the trees.

To the Ghanaian architect, reconstructing the house meant dividing up the problem into pre-given ordered categories. The SWOT analysis seemed to be a structuring figure that he could use whenever he encountered a dilapidated house. It had similarities with both the ruler and the Munsell Code in that it shared their universal aspirations and potential global outreach. However, the SWOT analysis that the Ghanaian architect came up with that particular afternoon on the site differed from the kind of analyses that the Danish architect was coming up with. Although the ruler contained ideas of being applied neutrally to the world, we saw how it also had a creative side. Through the ruler, the Danish architect could receive ‘messages’ from his former compatriots. The SWOT analysis likewise contained ideas of being applied neutrally, as a structuring factor, to the case at hand. But it also had a creative element – it was not just a detached model for analysis to be applied to the world, but was itself a perspective which, through sensuous mimetic relations, shaped the analysis. It was a model that could transform or displace the Ghanaian architect through sensuous mimetic relations. By using the SWOT analysis, the architect was not only able to find technical solutions to the building, but could also receive messages from people living nearby; in a highly structured way, he could be informed of their needs and concerns. By listening carefully, or maybe intuitively that very afternoon, since a SWOT analysis had never been included in the project design, the Ghanaian architect was able to receive messages that reflected the workers’ and villagers’ concerns, namely attracting jobs, tourists and money into the village. These concerns were not, however, of primary concern to the project planners, particularly not the Danes involved, who labelled them as ‘side-effects’. The Danes’ interest was more in line with that of the Danish architect: that of
receiving messages from the past and getting to know ‘our common history’. One might say that in the project plan, contemporary needs and concerns regarding jobs and tourism had nothing to do with the original. Indeed, the interests of the two architects reflected different communities. The Frederiksgave site was apparently valued differently. These different concerns and ways of creating value at the Frederiksgave site will be the focus of the next chapter.

During my fieldwork and analysis, it became clear that Frederiksgave is not a self-contained thing to be reflected upon from a distance – not even from a symmetrical axis or from a universal history. Norton Wise writes about the role of images in scientific knowledge production. Quoting the botanist Linné, who is said to have exclaimed: ‘Whoever derived a firm argument from a picture?’,66 Wise regretfully suggests that images have often been thought of as either ‘much too powerful, likely to lead to the deceptive excesses of imagination rather than the calm reflections of reason, [or], on the other, as much too weak, capable of illuminating only the surface of things rather than their deep structure’.67 Images are either thought of as deceptive, derailing the object of study, or too weak to penetrate the surface. In this chapter, we have seen a variety of images: maps, architectural drawings, models and sketches. Instead of deceiving us, I argue that these images constitute and transform the Frederiksgave site in multiple ways. Realising the need for transformative magic as a component of reconstructing work that explodes the notions of copy and original, of constructionism and materialism, is one way of anthropologically qualifying common heritage.