

Technology, Labor, and Mediation in Egyptian Film Production

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Abstract

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This thesis examines the way in which imponderable problems are mediated in the everyday work of commercial film production in Egypt. By ‘imponderable problem’, I mean a working problem encountered in an extended production process whereby the individual worker, in the present, cannot account for all courses of action leading onto the process’s expected outcome. I argue that workers in film production can never entirely solve this kind of problem: they ‘mediate’ it. They rely on various assumptions and material mediators to break this overall imponderability into a series of contingent tasks, thereby modifying the expected outcome. I situate this mediation in the wider context of the contemporary Egyptian film industry, with its interpersonal mode of interaction, its labor hierarchy, its socio-technical process of production, and its technological implements. This thesis analyzes three imponderable problems in particular: how to coordinate a shooting day; how to visualize the film; and how to anticipate the audience’s composition and reaction.

The overall argument is situated within media anthropology, where media production tends to be examined as a ‘social’ phenomenon inscribed on an invisible technological substratum, without exploring the material implications of everyday technological objects in a temporally extended process of production. This literature, moreover, tends to be inattentive to the gap between the way in which the film unfolds and the way in which social agents involved in its making anticipate this unfolding. This thesis, by contrast, considers how Egyptian filmmakers try to anticipate the future of their activity. In addition to being an ethnographic account of the Egyptian film industry, this thesis contributes to the anthropological literature on media production by exploring how workers concretely mediate between the present and the near-/far-future.

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Much like planning a shooting day or visualizing a film, writing a thesis is, at its core, an imponderable problem. The various strategies through which I have tried to mediate this imponderability are not without resembling the ones employed by my interlocutors in the Egyptian film industry: they include a great number of now invisible readings, conversations, observations, and interactions. This thesis will therefore stand, to the reader, as a 'reified' product of much concrete labor, anticipations, anxieties, funny moments, generous assistance, and an innumerable number of 'encounters' in Deleuze's sense. I can only begin to uncover all the work invested in this thesis through this acknowledgment section, and I hope to be forgiven by anyone that I mistakenly omit.

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Notes

Against scholarly conventions of transliteration in Middle Eastern studies, I have decided to adopt the phonetic script used by contemporary Egyptians in online communication, known as ‘Arabeezi’. With its mixture of Latin alphabet and Arabic numerals, this script is unusual in academic writing. However, I believe that this script can easily and faithfully transcribe all meaningful phonetics in Egyptian colloquial Arabic, while leaving the non-Arabist with a script unhindered by diacritical signs, easily readable by ignoring numerals in words. To the uninitiated:

2 = ’ (hamza)

3 = ‘ (ain)

5 = h (kha’)

7 = h (ha’)

8 = ġ (ghain)

I will use this transliteration system with all common names, while proper names retain their conventional spelling (e.g. Chadi Abdelsalam vs. Shadi 3abdel-Salam). All translations in the text, whether from Arabic or French, are my own, and I take full responsibility for any misunderstanding occasioned by them.

Further, I wish to clarify some terminological issues. First, I use the term ‘filmmaker’ to designate any and all cast/crew member involved in the everyday work of commercial film production in Egypt. For the sake of readability, I have preferred this term to the more cumbersome ‘maker of film’ or ‘film practitioner’, and I never use the term ‘filmmaker’ in the metonymic sense in which the expression has come to mean ‘director’.

Second, I use the terms ‘final film’ or ‘film product’ to designate the theatrical release of a film project. Since the term ‘film’ captures a wider range of ambiguous

meanings in the course of film production, I reserve the term ‘final film’ to designate the objectified product distributed and exhibited in movie theatres.

Third, I have used the somewhat unusual terms of ‘agent’ and ‘social agent’ to avoid confusion between ‘social actors’ in a general sociological sense and professional cinema actors. Any mention of ‘actors’ are specifically meant to refer to the profession, not the analytical term employed in anthropological writing.

Fourth, in order to avoid confusion between the role of continuity script supervisor and the physical movie script, I have decided to refer to the latter exclusively as a ‘scenario’, reflecting conventional usage in the Egyptian film industry.

Fifth, whenever it is used without brackets, the term ‘popular’ reflects conventional usage and could be synonymous with ‘widespread’ or ‘widely approved’. Whenever used *with* brackets, however, the term translates the Arabic *sha3bi*, which is a marker distinctive of ‘working class’ quarters in Cairo, yet going beyond class lines to designate a certain lifestyle, with its own language, consumption patterns, and domestic norms.

Lastly, I use the term ‘interlocutor’ to refer to any and all participants in my research project. Following Winegar (2006), I have preferred this term in part because it captures the dialogic process through which I have crafted data about the film industry, while situating my own knowledge-making practice on par with my interlocutors’ attempts to grapple with their social world (see section VI in chapter 3). The anthropological convention according to which participants are ‘informants’ is inadequate in this regard, since I do not believe that all my participants are better ‘informed’ than I am about the Egyptian film industry, and I think that the conversations we had about their lives involve more than the strict transmission of ‘information’ between the informant and the anthropologist.

The price of the Egyptian pound (LE) has varied while I was in the field, but it was between 6.5:1 and 7.5:1 USD according to the national bank rates.

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À Papa, Maman et Zizou

Introduction

*Obviously, not everything that happens to us comes as a surprise.
Much is predictable enough, but what we cannot have is certainty.*

– Graeber, 2012

This thesis considers a question with which I have contended in theory like my Egyptian interlocutors contended in practice: *how are imponderable problems mediated in the contemporary process of commercial film production in Egypt?* In its shortened version, the question ‘how are imponderable problems mediated’ could be asked of any long-term production process, like shooting a commercial, or building a canoe, or even writing a thesis. This is why my description of contemporary commercial film production in Egypt might seem, in some instances, to lose its social and historical specificity. Nevertheless, this thesis is based on extensive fieldwork in Cairo and, as such, the combination of assumptions and mediators marshalled by Egyptian filmmakers to mediate imponderability will be specific to this setting. The reasons that initially led me to study this setting are detailed in section IV, but I believe that the wider theoretical discussion on imponderability will make an important and situated contribution to the anthropology of media production and, more widely, of mediation. Thus, this thesis examines the underexplored relation between the present and the future in complex (media) production processes, as I detail in sections II and III.

I. Imponderable Problems

‘We’re screwed!’ exclaimed Ahmed Farghalli¹. The line producer in *Décor* (dir. Ahmad Abdalla, 2014) had a habit of expressing his inauspicious sentiments about the film’s progress. This time, his exclamation came after a long meeting in the project’s preparations, which had been intensifying over the previous two months: many actors had been cast; some locations had been chosen; set design was under way; the production team was securing permits. This meeting, held on December 8th in 2013, was an opportunity to go over the scenario as it stood to make sure that everyone in the artistic crew, the direction team, and the production team was on the same page. The first assistant director (AD), Omar el-Zohairy, gave an official numbering of scenes, which would later be adjusted as the scenario was modified. The director, Ahmad Abdalla, explained in some detail how he intended to shoot every scene, while getting asked about lighting, movement, and colors by the cinematographer, Tarek Hefny, the art directors, Nihal Farouk and Asem Ali, and the stylist, Salma Sami. The continuity script supervisors, Jaylan Auf and Mariam el-Bagoury, got to ensure that they understood the narrative link between disjointed scenes in the protagonist’s parallel worlds. Ahmed Farghalli, at last, got to ask some questions about the logistical execution of certain scenes, while relying on his production manager, Mohammed Setohy, and his location manager, Ahmad Abdallah Abdel Halim, to reassure the artistic crew that their ongoing demands were being executed.

¹ I have chosen *not* to anonymize my interlocutors, for reasons which have been better articulated by Dornfeld: ‘Since I was empathetic to the views and situation of the producers, I felt it was unnecessary to obscure the identities of the principal subjects. This effort would probably have been futile anyway, since the names of the members of the production team would be clear to those potential readers for whom this information mattered most, that is, other (...) practitioners’ (1998: 28). None of my interlocutors ever expressed reticence at having their names mentioned: in fact, many explicitly asked to be included by name, and I have done according to their wishes.

When only his production crew members and I were left in the room, some time following the meeting, Farghalli smirked and said, ‘We’re screwed!’

When I asked Farghalli, on the spot, why he thought that we were going to be screwed, he answered with his usual cryptic remark that, we don’t know it now, but it will eventually happen, adding that ‘they’ are still unsure about many things. This addition gives a situated meaning to Farghalli’s words: they, the artistic crew, remain undecided about many aspects in *Décor*’s scenario which we, the production team, have to plan and execute. In consequence, even after a six-hour meeting in which the project was supposed to be clarified in many respects, Farghalli remained unsure about the way in which it would be executed. His anxiety can be interpreted on two levels. On one hand, he is concerned by all the work left to the production team, which explains why he believes that the artists’ indecision will get him screwed; on the other, he is concerned by what he does not know *now* but will *eventually* be known. What Farghalli chose to do next was not to capitulate to this uncertainty, but to ask Setohy to write a to-do list, on paper, with all the production missions he knew were necessary. The list included acquiring a gramophone and a ballerina box; calling Reda Zanita’s camera company to hire a 35mm analog camera as a prop; and scouting the train crossing in the Egyptian Media Production City (EMPC). Each task was allocated to a specific crew member in the production team, who would be expected to execute it on the very next day. Eventually, the gramophone, the ballerina box, and the 35mm camera were used in different scenes in *Décor*, and the scene at the EMPC’s train crossing was shot on March 24th of 2014.

It would seem that Farghalli did not get screwed after all. Yet this would ignore several vain efforts invested in planning and executing *Décor*’s shooting. On the to-do list, there was an entry to scout the entrance of the protagonist’s husband’s apartment across Cairo – a task that exhausted the production manager Setohy and his assistants. This

entrance was eventually shot in Alexandria, on a late decision by the artistic crew, while all efforts to scout in Cairo went down the drain. Earlier in the December 8th meeting, Farghalli asked the artistic crew how they would like to shoot the movie's *avant-titre*, the sequence prior to the beginning credits, which was supposed to feature set building craftsmen in action. Most artistic crew members, including Ahmad Abdalla, Tarek Hefny, and Nihal Farouk, wanted to shoot the *avant-titre* in documentary style, while the actual set was being built. Yet the art director Asem Ali, who was in charge of set building, warned that this strategy might hinder the progress of the actual building operation. A few days prior to shooting the *avant-titre*, some weeks later, the *de facto* compromise was to leave very few items to be built on the actual set, and to shoot inserts on actual set builders engaged in a staged building operation centered on these items. Thus, set building went largely unhindered while the *avant-titre* included some degree of 'real-life' building work.

The discrepancy between the preparation and execution of this shooting day illustrates how no one in the December 8th meeting could know, with certainty, how the *avant-titre*, let alone the rest of the shooting schedule, would end up happening. The fact that the gramophone, the ballerina box, and the 35mm camera were eventually acquired and shot need not make us believe that the logistical work invested in making *Décor* was 'automatic'. Yet, the lack of certainty concerning this work cannot be interpreted as a wholesale uncertainty about the future: to quote Graeber, 'much is predictable enough' (2012: 26). Faced with what I have chosen to call the 'imponderability' of planning and executing a shooting day, production crew members have mediated the issue through a variety of assumptions – including a strict division of labor between Farghalli, his production team, and the artistic crew; an awareness of the operational sequence between preparations and shooting – as well as a variety of written mediators like the scenario or the production's to-do list.

As I define it, a problem is ‘imponderable’ when it becomes impossible to the individual agent, at the beginning of a socio-technical process, to assign a specific weight to each possible course of action leading onto its expected outcome. Imponderable problems, then, are always situated in a complex production process where the outcome is somewhat predictable. They exceed the individual agent by their temporal extension, yet they engage him/her in a genuine, everyday struggle to reach the expected outcome. Through this struggle, the initially imponderable outcome becomes a set of contingent actions and decisions, building upon each other throughout the production process. Had Farghalli tried to envision all the logistical elements needed to shoot *Décor*, he could never have known exactly what they might be because all the actions to be taken by all the workers involved in the project were, on December 8th of 2013, only known or knowable to a limited extent. Moreover, the compounded effect of contingent decisions to be taken in the course of making *Décor* could never have been totally simulated in his mind. In short, imponderable problems escape the individual agent’s capacity to envision all courses of action leading onto the expected outcome of a socio-technical process, thereby leading these agents to rely on well-honed assumptions and mediators to make this process contingent in its unfolding.

To be sure, not all working problems in film production are imponderable. For instance, arranging a convenient meeting time for a screenwriting session is not imponderable: it does not go without saying, but it is possible to negotiate a set number of meeting times and places and choose among them. While no one can ever have absolute certainty that they shall meet, hence the proverbial *inshallah* (‘God-willing’), arranging meetings remains a problem that can be weighed to some extent and solved by direct action. An imponderable problem, by contrast, can never be entirely solved in such a manner: it can only be *mediated*. In this sense, individual agents *try* to solve imponderable

problems by using a variety of human and nonhuman resources to *mediate* between the problem in the present (e.g. planning a shooting day) and its expected outcome (e.g. the shoot itself).

Through this mediation, the agent's apprehension of the outcome of the problem comes to be modified. An imponderable outcome (e.g. the shooting day as a logistical behemoth) comes to be a series of contingent actions (e.g. getting a gramophone and a ballerina box, scouting the train crossing location). What interests me, in short, is not the 'solution' to which social agents eventually come, but the various social relations, socio-technical operations, and technological objects mediating the problem's imponderability. Moreover, I am not so much interested in the everyday negotiation of 'uncertainty' or 'unpredictability', but more so in the way in which different social agents, at different moments in a *situated* process of production, apprehend what needs to be done in order to make a media product.

In what follows, I will discuss my contributions to the academic literature on media and mediation in anthropology. In section II, I will highlight the empirical contributions made by my ethnography of the Egyptian film industry to existing media production ethnographies. In section III, I will explain in what sense I seek to contribute to existing debates on technology and mediation in anthropology. Section IV is devoted to explaining the methods that I employed in order to answer my research question, the access that I was granted into the Egyptian film industry, as well as my own position as a participant observer in this field site. This section is vital in situating the kind of knowledge generated by this thesis, as it is filtered through my immersion in an 'object' of study – the Egyptian film industry – that vastly exceeds my own fieldwork. Section V, at last, will rehearse the main argument while highlighting the limitations of this ethnography.

II. The Anthropology of Media Production

This thesis is the first ethnography of everyday working practices in the Egyptian film industry. As I detail in chapter 1, several scholars have worked on Egyptian film production in a historical, political economic perspective (cf. Shafik, 1998; Flibbert, 2001; Armbrust, 2004). However, no anthropologist has ever studied everyday working practices in this regionally important industry. This partly explains the ambiguity of my position as an ethnographer, since my interlocutors had never worked with an anthropologist before (see section IV). It also explains why I have avidly sought ethnographic accounts of commercial film production worldwide, but there has been relatively little scholarship in this vein². Powdermaker's (1950) pioneering work on classical Hollywood has not managed to put commercial film production on the ethnographic agenda, and it is only in the 2000s that ethnographic accounts of commercial filmmaking have started accumulating in Ghana (Meyer, 2003; 2004; 2015), Nigeria (Larkin, 2008), Bombay (Grimaud, 2003; Ganti, 2004; 2012; Wilkinson-Weber, 2005; 2010; 2011; 2014), Chennai (Pandian, 2013; 2015), Dhaka (Hoek, 2014), Hong Kong (Martin, 2012a; 2012b), Denmark (Strandvad, 2011), France (Rot & de Verdalle, 2013; Rot, 2014), and the United States (Bechky, 2006; Ortner, 2013). These accounts are not necessarily produced by card-carrying anthropologists, and they do not necessarily have similar theoretical interests, but they share a methodological commitment to long-term participant observation in media

² I am aware that there is a sizeable body of knowledge on *ethnographic* film production in visual anthropology (see Hockings, 2003 [1975]; Ruby, 2000; MacDougall, 2006; Pink, 2006; Banks & Ruby, 2011; Suhr & Willerslev, 2012). I have chosen not to review this literature extensively because of its different 'agenda', to use Banks & Morphy's words: 'One agenda of visual anthropology is (...) to determine the properties of visual systems and the conditions of their interpretation and to relate the particular systems to the complexities of the social and political processes of which they are a part. A second agenda is to analyse the visual means of disseminating anthropological knowledge itself' (Banks & Morphy, 1997: 2). Writings on ethnographic film generally fall in line with the second agenda, with its core interest in the transmission of anthropological knowledge, while this thesis falls in line with the first agenda and its interest in situating visual production practices in their wider social context.

production sites. This commitment reveals a fine-grained picture of everyday production practices, in addition to lending insight into the concrete intentions, desires, and representations of media producers, in a way which was not possible with earlier text-centered or institution-centered scholarship in media studies (see Ginsburg & al., 2002 and Ganti, 2014, for a fuller account of the value of ethnography in media research).

This methodological commitment is shared by a much wider literature on media production in anthropology – e.g. in television (Ginsburg, 1991; 1993; Dornfeld, 1998; Dávila, 1999; Born, 2004; Abu-Lughod, 2005; Salamandra, 2005; 2008; Moll, 2010; Pype, 2012; Barkin, 2013; 2014; Matzner, 2014), in advertising (Moeran, 1996; Dávila, 2001; Mazzarella, 2003), or in news making (Peterson, 2005; Bird, 2010; Gürsel, 2010; 2012; Bishara, 2013; Boyer, 2005; 2013; Jusionyte, 2015). This thesis is very much cast in this methodological mould, although it cannot address all the theoretical issues raised by this diverse literature. As will be apparent throughout the thesis, I use concepts crafted by anthropologists in other media industries to illuminate some aspects of Egyptian film production (see, e.g., my discussion on Ganti's 'boundary-work' in chapter 1). Yet, the analysis presented in these pages will not address two central concerns in this literature: media content and media audiences. Arguably, an interest in media narratives and audiences is the central thread in the resurgent scholarship on media in anthropology since the 1990s. This growth has had several intellectual roots, whose genealogy has been better traced by other scholars (see Ginsburg, 1998; Banks & Ruby, 2011). For the purposes of my argument, I will only highlight two streams in this genealogy.

The first stream includes a significant portion of visual anthropology research, which addresses the extent to which the visual – including photographs, TV documentaries, and ethnographic films – can communicate anthropological knowledge to various audiences (see Martinez, 1992; Crawford & Hafsteinsson, 1996; Banks & Morphy,

1997; Morton & Edwards, 2006; Banks & Ruby, 2011). The second stream comprises a host of studies that examine the way in which mass-mediated narratives allow their audiences to locally imagine and situate their identity in a global, national, or at least supra-local worldview (Dickey, 1993; Abu-Lughod, 1993; 1997; 2005; Mankekar, 1993; 1999; Notar, 1994; Hahn, 1994; Appadurai, 1996; Foster, 1996; Armbrust, 1996; 1998; Larkin, 1998; Salamandra, 1998; 2012; Derné, 2000; Meyer, 2003; Friedman, 2006). In both streams, participant observation allows intimate contact with the multiple interpretations of media narratives made by local audiences, while showing how the very notion of a ‘mass audience’, passively and uniformly absorbing media messages, is a problematic construct. In the words of Putnam Hughes, ‘We can define an audience in terms of various different and overlapping coordinates – place, social categories, media technologies, media content, or specific times.’ (2011: 292)

While acknowledging these core findings – i.e. media narratives are appropriated in different ways by local audiences; and these audiences do not constitute an *a priori* homogenous whole – this thesis will focus on the *productive* activity of media producers. What I wish to highlight, above all, are concerns with media production as *labor* (see chapter 2), *process* (see chapter 3), and *technological use* (see chapter 4). These concerns are vital, on one hand, to describe how the film industry works on a day-to-day level, and on the other, to lay the groundwork for an analysis of filmmakers’ engagement with imponderable problems. Indeed, without a sense of concrete workers and their hierarchical division of tasks, production operations, and everyday technological use, it would be difficult to understand how an Egyptian filmmaker like Ahmed Farghalli mediates, to go back to the opening vignette, the imponderability involved in preparing and executing a shooting. An exclusive interest in the consumption of media content by local audiences

could not address the empirical issues involved in Farghalli's productive activity³. I will ask, in particular, how media production labor is organized; how this labor extends over time in a long-term process of production; and how technological objects are used throughout this process.

In my estimation, these concerns are insufficiently covered in media anthropology, or even in media production ethnographies. These studies try to show, for instance, how Latino TV producers and advertisers craft a pan-Hispanic identity through their programming (Dávila, 1999, 2001); or how Bombay advertisers create an ideal-typical, middle-class 'Indian consumer' as a marketing target (Mazzarella, 2003); or how educated, 'modernist' television producers imagine their lower-class audiences in Egypt (Abu-Lughod, 2005) or in India (Matzner, 2014). In all these examples, media production labor, process, and technology are sidestepped in favor of a more classical interest in narrative and audience. This is not to say that no ethnographies have had similar interests to mine: one will find important parallels with Dornfeld's study of the PBS series *Childhood* (1998), Gürsel's study of image brokering in the AP's wire-service photography (2010; 2012; 2016), as well as Grimaud's (2003) and Hoek's (2014) in-depth, beginning-to-end inquiries into specific movie projects in Bombay and Dhaka.

What is more, this thesis will be grounded in two important insights emerging from media production ethnographies. The first insight is that it is insufficient to consider the

³ This is not to say that there is an *a priori* division between production and consumption: as Wilkinson-Weber remarks in the case of costume-makers in Bollywood (2010), the media 'producer' is always a 'consumer' in some respect (e.g. when buying costumes in commercial boutiques to dress movie stars). Certain practices of film production are, inseparably, practices of consumption – e.g. 'styling' costumes with clothes bought in commercial boutiques, in Bollywood as well as in Cairo. The same argument can be made about the way in which Egyptian filmmakers consume media products in their everyday life – commercials, video clips, TV serials, movies, and so on. One could be tempted, in this sense, to argue that the boundary between filmmaker and audience has become nonexistent, but I would argue that the blurriness of the boundary does not signify its absence. Egyptian filmmakers are not 'produsers' (Bird, 2011), a term that may well apply to producers/consumers 'sharing' content on an equally accessible online platform like YouTube, but cannot apply to the Egyptian film industry as a separate space, with a separate history, division of labor, production practices, and even patterns of technological use as opposed to lay audiences and lay video-makers.

media producer's worldview without considering his/her insertion in wider structures of authority. These structures may be institutional, as in Born's analysis of policy changes in the BBC and their impact on programming decisions (2004), but they may well be inscribed in a more diffuse yet widely accepted hierarchy of labor. The latter is evinced by Ganti's and Ortner's respective ethnographies in Bombay (2012: 202-205) and the United States (2013: 205-210). Working in a similar vein, chapters 1 and 2 will describe the institutions and ingrained hierarchies constraining the daily work of Egyptian filmmakers. I would argue that this is necessary groundwork to understand, in effect, how the very ability to discuss a film's narrative and imagined audience is controlled by a narrow portion of the filmmaking world, situated at the top of its labor hierarchy. Were I to just address how artistic workers craft narratives and imagine audiences, I would be omitting a great portion of the labor exerted by workers who are neither dominant institutionally nor in the industry's labor hierarchy. Thus, this thesis engages in a descriptive endeavor on the model of Becker's pioneering study of 'art worlds', i.e. 'all the people necessary to the production of the characteristic works which that world, and perhaps others as well, define as art' (2008: 34). This approach has already been successfully adapted to the ethnographic study of contemporary art in Egypt (see Winegar, 2006). With the caveat that the Egyptian film industry produces 'films', not necessarily 'art', I wish to extend this approach to the concrete labor invested by Egyptian filmmakers in commercial film production.

The second insight is that, in addition to its wider political, economic, and social determinants, filmmaking labor is always situated in a temporally extended, socio-technical production process. This sense of process is what distinguishes, *prima facie*, Ganti's (2012) and Ortner's (2013) ethnographies from Grimaud's (2003) and Hoek's (2014). This combination of an interest in revealing the labor mediating an apparently 'immediate' product (i.e. the final film) and in discussing the temporally extended process

through which this product is made characterizes the studies whose example, as I already stated, will be followed throughout this thesis (i.e. Dornfeld, 1998; Grimaud, 2003; Gürsel, 2010; 2012; Hoek, 2014). While Ganti and Ortner provide solid historically situated understandings of daily work in their respective industries, they never situate this work within the extended socio-technical process in which filmmakers are engaged in their day-to-day activity. They come to imply, in effect, that what a director does is directing here and now, and what a cameraman does is filming here and now, when in fact both workers work here and now *and* according to temporal considerations extending into the future.

This is not to say that the director directs and the cameraman shoots in both the present and the future at once, but rather, that their current activities are guided by a consideration of what will come next, both in the near- and the far-future, in specific ‘incoming futures’ as I argue in section V of chapter 4. This term, in brief, is meant to capture the way in which social agents conceive, in the present, of near- and far-future timescales. I would stake that the existence of ‘incoming futures’ is not unique to commercial film production in Egypt, yet the particular ways in which Egyptian filmmakers mediate the imponderability of their future activity in a particular historical setting is specific to just that setting. In the next section, I situate this idea of ‘mediation’ with regards to my interest in the use of technological objects in media production, and to my contribution to the broader literature on mediation in anthropology.

III. Technology and Mediation

Almost all the studies outlined in section II give insufficient attention to technological objects and their daily use in media production practices. This sweeping statement might

be irritating to some, because I seem to overlook a sizeable literature on technology in media anthropology. As Ginsburg et al. have long ago recognized, ‘Refiguring the ethnography of media necessitates a further expansion by taking into consideration the physical and sensory properties of the technologies themselves and examining the materiality of communication across cultures’ (2002: 19). My contention is not that the anthropology of media has never addressed ‘technology’, which would be incorrect, but that it has seldom described the way in which media producers use technological objects like cameras, laptops, mobile phones, paper, and so on. With the exception of mobile phones, whose social impact has been examined in its own right (see Horst & Miller, 2006; Archambault, 2012; 2013; Madianou & Miller, 2012), these technologies only feature in passing in media production ethnographies – as in Ganti’s fleeting reference to a producer typing on a laptop (2012: 225), or in Pandian’s description of a producer’s compulsive phone use (2015: 42). This thesis, then, is the first systematic engagement with the use of technological objects by media workers in a socio-technical process of media production – with the noted exception of Grimaud (2003).

According to Grimaud, there is no way to understand filmic creation without engaging with the ‘materials’ through which films are composed and recomposed. Filmmaking, he argues, is ‘largely shared between individuals, material components, and the phases of the cinematographic process’ (2003: 10). Grimaud’s ambition, much like mine, is to provide a thick description of a process which is conventionally seen to occur over and above media technologies. In his own words, ‘Treating cinema *a priori* as a “language” (even visual), a “mythology” or the product of an “imaginary” (that of a collective or an author) is to operate a shortcut vis-à-vis everything that makes its concrete and temporal thickness.’ (2003: 11) This ‘everything’ includes, on a descriptive level, the technological objects absent in too many media production ethnographies. This absence is

partly due to the assumption that cinematic creation is the immediate product of discourse, myth, or imagination. Why, in this view, would anthropologists be interested in examining the use of technological objects in media production? What are media technologies except neutral conduits to the narrative construction of a scenario, or the visual imagination of a director? I would argue that technological objects are central to this process precisely because of its imponderable future. To individual filmmakers, in this sense, the object becomes what I call, borrowing from Heidegger's philosophy of technology, a 'reserve', a proxy which summons the filmmaker's attention to anticipating his near- and far-future actions. I elaborate on this term in chapter 4, but I stake the distinction between 'objects' and 'reserves' as an important contribution to understanding how media technologies act in the everyday work of filmmaking.

My emphasis on technological objects contrasts with the way in which 'technology' is invoked in media anthropology, most often as an entire technological form like 'television technology' or 'cinema technology', without attention to the use of technological objects in proximate contact with media-makers. When these objects are addressed, it is through the lens of their materiality. Researchers interested in the materiality of media ask how a medium's physical form inflects its everyday experience. For example, taking inspiration from McLuhan's well-known dictum that 'the medium is the message' (1964), Spitulnik (1998; 2002) has argued that the radio's physical properties – its ability to shrink spatiotemporal distances, its ability to disembody the human voice – have inflected colonial and postcolonial discourses on modernity in Zambia⁴. With a similar interest in the relation between colonialism and technology, Larkin (1998; 2008)

⁴ While criticizing McLuhan's universalism, Spitulnik argues that the radio's materiality creates a historically specific and culturally situated experience of modernity. An interesting example is the earliest radio equipment in colonial Zambia, which was deliberately not painted in blue because colonial administrators had some intuition that the invention would be rejected by the population as 'sorcery'. Here, the seemingly random material decision to *not* paint a radio with a certain color is motivated by historically contingent factors, which in turn inflect the colonial Zambian's experience.

argues that the technological infrastructure undergirding all media – e.g. cinema hall buildings, electrical grids, public megaphones – is not just a neutral conduit to mass mediation: their very material existence entails a certain experience of modernity. Thus, the constant failure of electrical infrastructure is not just a technical hassle, but also a material index of the Nigerian government's inability to service its citizens. The physical experience of electricity cuts thereby gains social and political significance.

Without neglecting the material properties of technological objects, as I explore in chapter 4, my prime interest remains in showing how they are engaged in *mediating* imponderable problems. I intentionally use the term 'mediation' to engage, on one hand, with anthropological interest in what may be called the 'paradox of mediation' (Eisenlohr, 2009: 273-274), and on the other, with theoretical works in material culture studies (MCS) and science and technology studies (STS), where the notion of 'mediation' plays a key role. Media anthropology tends to concentrate on technology's (present) materiality or, as I will detail shortly, on its (present) impact over mediated content. This content is usually already recorded, such that the analysis centers on the relation between the content's past and its current use. Even in MCS or STS, the relation between the present and the future is sidestepped by examining, say, an object's past biography, or its appropriation in a synchronic set of social relations, or its retroductive black-boxing. In all these instances, any sense of the contingency involved in the social agent's ongoing decision-making is lost, and the way in which technological objects *mediate* this relation to an imponderable outcome is thereby ignored.

The 'paradox of mediation' is the idea that the very technological objects used to carry media content over distant spaces and times are made invisible by local practices and understandings of media usage. In Eisenlohr's words, 'as uses of new media technologies gain greater prominence in the contemporary world, these same complex artifacts are also

the focus of fantasies of immediacy or unmediated transparency between communicating [social] actors' (2009: 273). Among the Mauritian Muslims studied by Eisenlohr (2006; 2009; 2010), such fantasies of immediacy cluster around audiocassette tapes of a genre of Sufi songs known as '*na't*', recorded by Indian or Pakistani masters, and widely distributed in Mauritius. While these songs have been transmitted via written text before audiocassette technology, the relatively low level of Urdu literacy in Mauritius combined with genuine anxiety over 'authentic' pronunciation and performance makes audiocassettes an ideal means of mediating a master's voice to the Mauritian performer/listener. As Eisenlohr contends, however, desires of immediacy are ultimately thwarted by the technology's material presence. While the devotee seeks direct contact with the song master's voice, this contact will always remain mediated by audiocassette or audio CD technology, with specific advantages and disadvantages (e.g. the material proximity between *na't* recordings and the illicit yet ubiquitous recordings of Hindi popular songs).

This tension between the technology's visible presence and its im-mediated content has been touched upon in 'digital' ethnographies⁵, as well as in some studies at the intersection of media and religion⁶. To give an example on the 'digital' side, Mazzarella (2006) describes how the Internet is conceived by some Indians as an X-ray machine designed to immediately reveal otherwise hidden realities, such as high-level corruption in

⁵ These ethnographies investigate the conditions under which digital technology is appropriated in localized settings – whether among Trinidadians (Miller & Slater, 2000), 'geeks' in the Free Software movement (Kelty, 2008), online avatars in Second Life (Boelstorff, 2008), or political activists in suburban Kuala Lumpur (Postill, 2011). Similar concerns are evident in Born's work on musical composition in IRCAM (1995; 1997), Villi & Stochetti's special issue on photo-messaging (2011), Humphrey's work on Russian chat rooms (2009), and Coleman's ethnography of hacktivism (2013).

⁶ As Meyer argues in the case of Pentecostal Ghanaian churches, media technologies 'seem to vest the mediation in which they take part with some sense of immediacy, as if the use of microphones or film would yield some extraordinary experience that brings people closer to the divine' (2011: 25). Here Meyer reprises an important theme in earlier articles on popular Ghanaian cinema (2003; 2004), where she argued that the camera is taken to reveal hidden truths (including the presence of God and the devil) by Ghanaian audiences. A similar argument is made in Engelke's review essay on religion and media (2010), Pype's ethnography of the production and reception of Pentecostal TV dramas in Kinshasa (2012), as well as Hirschkind's classical work on cassette sermons and their mediation via audiocassettes in Cairo (2006).

the Indian government. He juxtaposes this description with the Indian state's e-government ideology, according to which digital technologies will make government more efficient and transparent. Mazzarella teases out the irony in these opposite views on government transparency, as the Internet is made into a hyper-visible, corruption-revealing machine in one case; and in the other, an invisible network that immediately connects the government to the population.

Overall, anthropological works on digital mediation have been instrumental in showing how, in the words of Horst & Miller, 'humanity is not one iota more mediated by the rise of the digital' (2013: 3). Whether in the pre- or the post-digital era, social life is never lived 'immediately', so to speak, but always mediated by a variety of objects, media forms, social relations, institutions, and conventions. This overarching point has been made by some media anthropologists (see Mazzarella, 2004; Boyer, 2007; 2012), and it has been a key proposition of the 'material turn' spearheaded by Appadurai (1986) and Miller (1987). Against the earlier tide of symbolic approaches in anthropology, Appadurai and Miller, each in his own manner, have explained how the study of physical objects lends access into the everyday mediations constituting social life. While Appadurai promotes a study of the social life of objects as they accrue value across cycles of alienation and inalienability – or, in Kopytoff's words (1986), 'commoditization' and 'singularization' – Miller promotes a synchronic study of the appropriation of objects, understood as externalizations of social practice that are then reincorporated into one's identity via consumption.

These approaches take what may be called a 'dialectical' view on mediation, where subjects and objects are mutually constructed in everyday interaction. In this sense, they rejoin studies in the anthropology of techniques, where the act of *making* is at once a way of producing objects invested with certain social representations and socializing subjects

into acquiring certain predispositions to act (see Lemonnier, 1992; 2012; Martinelli, 1997; Warnier, 2001; 2009; Marchand, 2010). In contrast to the subject/object divide implied in this view, the approach to mediation developed by the early Latour (with Woolgar, 1979; 1987; 1988; 1993; 1996a; 1996b; 2000), Callon (1986), and Akrich (1987; 1993) criticizes this impulse to ‘purify’ subjects and objects, as it obfuscates their observable intermixture in socio-technical practice. These scholars privilege instead an analysis of the *translations* through which human and nonhuman actants try to stabilize a given socio-technical outcome – e.g. a scientific fact, a successful experiment, or a working electrical grid. In his classical essay on the Berlin key, Latour offers an important clarification on the distinction between a ‘dialectical’ approach to mediation and his own: while the former conceives of technological objects as *intermediaries*, endowed with a social meaning without interfering in its creation, the latter is all about *mediators*, which physically shape socio-technical meanings arising in a specific configuration of humans and nonhumans (2000: 18-19).

One will recognize my debt to all these approaches throughout this thesis. For instance, my description of the filmmaking process takes inspiration in the anthropology of techniques (see chapter 3), while my description of technological commodities in the Egyptian film industry draws on Appadurai’s and Miller’s insights on consumption (see chapter 4). Moreover, my use of the term ‘mediator’ is directly attributable to Latour (2000). All in all, my grounding view on ‘mediation’ in its broadest sense is closest to the one taken by the early Latour and his colleagues, as I am not so much interested in showing the mutual interaction between technological objects and filmmaking subjects as in understanding how all these ‘actants’ try to stabilize a particular socio-technical response to certain imponderable problems. Notice that the term ‘mediation’ is slippery in these literatures, oscillating ever so slightly between two distinct meanings. In Eisenlohr’s analysis, to single out one example, ‘mediation’ is understood as a specific process

whereby a media technology modifies its im-mediated content, thereby acting as a mediator in Latour's sense. In Appadurai, Miller, or Latour, by contrast, 'mediation' comes to designate a much wider concern with the subjects, objects, actions, representations, social relations..., constituting a specific configuration of humans and nonhumans acting to their own ends in a specific setting. The latter definition grounds the former, in a sense, since a technology's impact over media content occurs within a much wider set of concerns – in Eisenlohr's case, a Mauritian notion of national identity, anxieties over the authenticity of Sufi songs, and the illicit appeal of Hindi popular music.

Without siding with one meaning of mediation over the other, this thesis opens the notion of 'mediation' to a new avenue for inquiry, at the risk of burdening it a little more. What I see missing in studies of the 'paradox of mediation' or 'mediation as subject/object dialectic' or even as a 'configuration of humans and nonhumans' is a consideration of the way in which social agents mediate between the present and the future of their everyday activity. I use the term 'mediate' in two senses here: in the sense of a concrete attempt by single agents to overcome the imponderability at the beginning of the socio-technical process in which they are engaged; and in the sense of a concrete transformation, in so doing, of imponderable outcomes into more or less contingent tasks. The literature reviewed in this section envisages this transformation in a futureless mode. What I wish to argue is that, whenever they are engaged in a long-term production process here and now, social agents always anticipate its concrete possibilities in the incoming future. Through an analysis of the concrete ways in which Egyptian filmmakers cope with imponderability in film production, I seek to lend original insights into the concrete assumptions and mediators marshalled in making this imponderability contingent. As I mentioned earlier, it is beyond the scope of this thesis to generalize outside my experience in contemporary Egyptian filmmaking. I would still suggest that this analytical orientation opens interesting

avenues for inquiry in media anthropology generally, and in relation to mediation specifically.

IV. Methods, Access, and Position

A) Objectives and Methods: When I went to the field, I had two objectives in mind. First, I wanted to write an in-depth ethnographic account of the Egyptian film industry. Second, I wanted to examine how Egyptian filmmakers use everyday technological objects like phones, cameras, laptops, tablets, and so on. These objectives were meant to fill what I saw as two important gaps, one in the literature on media production in the Middle East, and another in the media anthropology literature, whose apprehension of ‘technology’ ignores the very devices through which our interlocutors experience ‘technology’ every day. This tendency may not be surprising, since these objects are not necessarily deemed important *in themselves* by our interlocutors. The impression according to which phones, laptops, or cameras transparently mediate ‘content’ is precisely what I seek to unsettle, not by arguing that these objects’ physical properties affect the way in which content is mediated (see Hirschkind, 2006; Eisenlohr, 2006; 2009), but by arguing that they are integral to the way in which Egyptian filmmakers mediate imponderable problems. The empirical contribution of this thesis may therefore be grouped in two parts: chapters 1 to 3 offer an ethnographic account of the Egyptian film industry, while chapters 4 to 7 describe and analyze the use of ordinary technological objects in the everyday work of Egyptian filmmakers.

Methodologically, these contributions are based on 18 months of participant observation between 2013 and 2015 in Cairo. In addition to participant observation, which

I extensively describe below, I have collected several newspaper articles, promotional materials, and what I call ‘written/visual mediators’, i.e. documents which are produced in the course of film production without featuring in the final film. These materials will not surface extensively throughout this thesis, even though they have informed my ideas about the Egyptian film industry at large, as well as the use of technological objects in everyday working activities. Furthermore, I have conducted around 40 formal interviews with directors, cinematographers, screenwriters, producers, and editors, out of which 23 were sound-recorded, and the rest reconstituted in long-form notes based on jottings. These interviews, like collected materials, will not surface in their rich complexity, except through targeted mentions of particular filmmakers and their ideas on given topics.

In addition to collecting materials and interviewing filmmakers, my core research activity has consisted in observing and participating in film projects at various stages in their production. I have aimed to gain some variety in projects and production phases as a way to mitigate the otherwise unavoidable problem of fieldwork in a media production site, namely, that ‘too many people were doing too many things at too fast a pace for me to track them all’ (Dornfeld, 1998: 27). In this respect, having some measure of repetition across several projects allowed me to gain a better sense of general trends in the industry and to better assess idiosyncratic behaviors. The projects that I have most closely followed are entitled *Décor* (dir. Ahmad Abdalla, New Century Film Production, 2014) and *Ward Masmoum* (*Poisonous Roses*, dir. Ahmad Fawzi Saleh, Al-Batrik Art Production, in postproduction). Moreover, I have witnessed some preparations and some days of shooting in *Qot w-Far* (*The Cat and the Mouse*, dir. Tamer Mohsen, New Century, 2015), *Qodrat Beir 3adeyya* (*Out of the Ordinary*, dir. Daoud Abdel Sayyed, New Century, 2015), *Al-Nabatshy* (*The Night Host*, dir. Ismail Farouk, New Century, 2015), as well as preparations

in an aborted project, *A5er Banafsegi Romansi* (*The Last Violet Romantic*, dir. Yousry Nasrallah, New Century).

From this brief enumeration, it is apparent that I have followed many films in New Century Film Production: I owe this company and its general manager, Ahmad Badawy, a great deal of my knowledge and access to the industry. I have spent countless days in New Century's offices to witness various phases in preparations, shooting, and even postproduction. Hanging out in company offices is mostly how I got to meet production teams affiliated with New Century, and various artistic and technical workers thereafter, some of whom I have followed in other projects. While all workers I met in New Century were generally friendly and receptive to my research, and while they would happily be interviewed by me and answer my unusual queries, my primary access to the company was guaranteed by Ahmad Badawy. I was indeed told that, had I not been introduced by Badawy, I would not be allowed into the backstage of all these projects. In this sense, the string of circumstances which led me to meet Badawy are instructive in explaining my access, as well as in explaining how interpersonal relations are vital to the Egyptian film industry's workings (see chapter 1, section IV).

B) Accessing the Industry: When I arrived in Cairo, on August 8th of 2013, I only had a handful of contacts in the industry. In addition to Tarek el-Telmissany, Egypt's most famous senior cinematographer and my mother's cousin, I had contact with Jennifer Peterson, a young assistant director trained in the Cairo Jesuit Cinema School, and Hala Lotfy, an independent director. These last contacts were supplied by my supervisor to be, Walter Armbrust, and they turned out to be invaluable friends. Yet my initial goal in entering the industry was to latch onto a film project and follow it from A to Z (*men al-alif elal-ya2*). I could not ask Jennifer and Hala to help me in this endeavor, since both women

operate at the margins of the core industry (*el-sina3a* or *el-sou2*, as it is locally known). At the margins, as I would learn when I started working on *Poisonous Roses*, the film production timeline is extensive and uneven given recurrent financial difficulties. With no formal training in film production or even any practical experience in this field, I never thought to enter the industry by attempting to get a job on set. Moreover, I did not want to enter through Tarek el-Telmissany, since it would have positioned me as a ‘relative’ (*2arib*) and might have overshadowed my role as researcher on set. Indeed, I have never explicitly worked my extended family connections to gain access to the industry, although I have had the benefit of contacts given by my parents. To my knowledge, these connections have never mattered to my interlocutors except as additional background to assess my trustworthiness. With these considerations in mind, I devised the idea of contacting some production companies that I knew were working on several projects at once. I had heard that New Century and the Sobky groups were still working, although I had no contact whatsoever with either company. I only had a name: Rasha el-Hamouly.

On an earlier visit to Cairo, in March 2013, I had briefly met with one of my parents’ old friends, Safaa el-Leissi, an editor turned film critic. My parents, both of whom are film scholars working on Egyptian cinema as well as film critics in Egypt, recommended Safaa as a possible lead into the industry’s everyday work. As I had found, however, Safaa was no longer working in editing by the time I went to Cairo, yet she was kind enough to link me with a certain Sahar el-Sherbiny, who worked in the international sales department in one of Egypt’s major production and distribution companies, Al-Arabia. Safaa called Sahar in my presence, and we had a brief encounter in March. I had hoped that I could work in Al-Arabia at the time, but Sahar informed me that the company had stopped producing in order to concentrate on distribution. She still gave me the names of some colleagues who worked in other production companies, although she did not give

me their phone/email contact. Among the names I was given was Rasha el-Hamouly's, who I was told was managing the production side in New Century. Upon returning to Cairo some months later, I tried to call Sahar el-Sherbiny to get Rasha's contact, yet her phone number did not work: when I called in Al-Arabia's offices, I was told that Sahar had left the company.

Anxious to get any kind of contact with New Century, I simply phoned in the company's offices and asked whether I could talk to Rasha el-Hamouly. I presented myself as a researcher (*ba7es*) working on the Egyptian film industry, and I said that I wanted to work with New Century, and that I was told to contact Rasha el-Hamouly. The office assistant seemed puzzled, and he asked me several times whether I was a journalist, and I repeated that I was a researcher from an English university. The assistant told me that Madame Rasha is away, and that I should call her on another day. I kept phoning in every day to ask about Rasha until, one time, the assistant transferred me on her line. I seized the opportunity, rehearsing my narrative: I am a researcher in Oxford University in England, I work on the Egyptian film industry, and I wish to follow a film from A to Z in New Century. After a few exchanges, Rasha told me that she was no longer in charge of production in New Century, and that I should contact Ahmad Badawy, the new general manager. She had the courtesy of giving me his phone number, and this was the only contact I ever had with Rasha, since she was to leave the company shortly after I had contacted her.

I called Ahmad Badawy immediately: I rehearsed my pitch, and he said that I could meet him in the Egyptian Media Production City (EMPC), where they were shooting. This was two weeks after the Rabaa Square massacre, where pro-Morsi protesters opposed to the July 3rd of 2013 military coup were killed and injured in threes while being evicted by force. Cairo was not easily navigable thereafter, given violent clashes between pro-Rabaa

protesters and the military every Friday, in addition to the military-sanctioned curfew at 7 pm every day. Thus, I had trouble arranging meetings in the first month or two of my fieldwork, although I persistently tried to gain new phone contacts. In any case, I did not want to make it to the EMPC in 6th of October City and back within a day, given the city traffic's strain under the curfew, so I asked Badawy to meet him in New Century's office in Dokki – a ten minute walk from my apartment. He replied that given the curfew, his crew was staying in 6th of October City until next week, and he asked me to call him again in order to set a meeting. I called him several times thereafter, and I finally got to meet Badawy on September 2nd, in the company's downtown offices in 36 Sharif St. This is when I discovered that New Century was, in fact, the same company as Dollar Film, one of the oldest active companies in the industry, originally founded in 1949. New Century was founded in 2004 as the company's production arm, leaving the Dollar label to distribution and exhibition.

When I met Badawy in person, I gave him more details about my intended research: I said that I wanted to be present in every single phase of filmmaking on a particular project; that I would simply be taking notes on set, writing up these notes on my computer every day; and that I would show him my notes if he so wished (which no one ever asked except in joking, as I would find out). Badawy said that there were no problems in these regards, although he asked me *not* to take any pictures on set, given concerns over leaking visual material to the press in anticipation of a film's release. This is why I never took any personal pictures in New Century: the reader expecting photographic illustrations of Egyptian film production will not find it in these pages, because it was a central condition of my access in New Century⁷. When he had heard me out, Badawy said that he

⁷ Badawy also asked me why I was interested in the Egyptian film industry specifically, and not in Euro-American industries, where 'real cinema' was being made, as opposed to local, hurly-burly cinema work. I replied that there was nothing written on Egypt's industry in English, and I thought that the experiences of Egyptian workers ought to make it into academic discourse. No matter my answer, Badawy's

had no problem in supporting my research, but he added that he wanted an official letter from Oxford stating that I was a researcher. I asked him about the letter's exact format, and he seemed a little unsettled by the question, simply adding, 'Just bring a letter'⁸. Once I had brought him a letter from my supervisor, Marcus Banks, Badawy looked over it summarily, and he said that he wanted to keep a copy to show to his boss, Walid el-Kurdi⁹. Badawy then agreed to insert me in the project which would constitute a significant portion of my participant observation, *Décor*, an 'artistic' black and white movie directed by Ahmad Abdalla and written by Mohammed and Shireen Diab, which was meant (according to Badawy) to get New Century on the international map of film festivals. I was 'in' at last.

My access to *Poisonous Roses* was somewhat different. In this case, I got the director Ahmad Fawzi Saleh's contact details from Hala Lotfy, who said that he would start shooting soon. When I met Fawzi Saleh (aka Fawzi) in October 2013, he told me that he was still working on his scenario, and it remained the case until October 2014, when we started shooting. Until this time, I became gradually more involved in the project as I increased my interactions with Fawzi, both in and outside work. At the beginning, I simply attended some meetings in the film's preparation with his ever-changing artistic crew. Sometime later, I started giving some opinions on the movie's artistic content, and I found in Fawzi an avid listener to my opinions (although I myself doubted that I could be of any

question already indicated local attitudes about the industry's position on an international scale, as well as anxiety over my capacity as a foreigner to 'look down' upon the local industry by contrast with Euro-American ones.

⁸ Ten weeks later, on the first shooting day in *Décor*, Badawy told Mohammed Diab (screenwriter), to whom I was being introduced, that he had doubts about my intentions at the beginning, and he asked for a letter to test whether I was serious and persistent enough in my endeavor (which, thankfully, he judged that I was).

⁹ As I was to discover, el-Kurdi is the company's financier. He inherited this role from his father, the late Ismail el-Kurdi, who had founded Dollar Film in 1949. Since Walid el-Kurdi is rarely in Cairo, Badawy managed the daily affairs of the company, but I was made to understand that all major financial decisions were made in consultation with el-Kurdi. Moreover, I frequently saw Badawy on the phone with his boss, without mentioning his frequent trips to London, where he kept el-Kurdi informed about the company's affairs.

help in this department). In the summer of 2014, while I was dining with Fawzi's family, he proposed that I become his assistant. I started working more actively on the scenario and, when we had a scenario ready to shoot, I did all kinds of preparation work (including partial breakdowns, casting, following on the production crew, and even some budgeting). Following an initial bout of shooting in the winter of 2014, I helped Fawzi with the rewriting of his scenario in the summer of 2015, and I translated this scenario in view of a (successful) grant application to the Doha Film Institute.

C) Position: I will talk about each movie's plotline in more detail in section V, but I now wish to show the major similarity between my access to New Century and to Al-Batrik, the production company in *Poisonous Roses*. Al-Batrik is much smaller than New Century and clearly underfunded¹⁰. However, I gained access to the company by establishing an enduring friendship (and working collaboration later on) with Ahmad Fawzi Saleh. Likewise, I gained access to New Century by convincing Badawy, who became a good friend, to allow my research in the company. While New Century is a bigger institution than Al-Batrik, my access in both cases was guaranteed by a personal relation; specifically, a relation to some of the most powerful social agents in each company. As I will argue in chapter 1, indeed, interpersonal relations are the basis of the industry's political economy, and it has certainly been my experience that the subsequent interactions that I had with workers in each company have been colored by the fact that I was 'Fawzi's friend' or 'Badawy's friend'. This link guaranteed my presence on set, and in every aspect of film production, as well as my position vis-à-vis other workers.

That said, my position in both projects was very different from the outset. In *Décor*, I was introduced by Ahmad Badawy to Ahmed Farghalli, the line producer, who

¹⁰ Fawzi would joke, rightly I felt, that he was his own company, although Al-Batrik technically belongs to the star Mahmoud Hemeda.

thereby became my guarantor to the cast/crew as well as a central interlocutor in my research. When we first met, Farghalli gave me the film's scenario and some breakdowns to read, and he made himself available to answer my questions. From then on, I would come to New Century's office every day to observe the preparations of *Décor*, and I tried to put my nose into every aspect of preparations, including scouting, set design, fitting, etc. Farghalli would moderate my urges, and I always respected the limits imposed by Farghalli. In addition to going to the company, I slowly introduced myself to each crew member, and I explained what I was doing. I even made some biographical interviews with some crew members at this early stage (which I continued in shooting and in postproduction). When *Décor* started shooting, I attended every single day, although I did not always attend the days from start to finish, and I did not always hang out with the same crew or in the same area on set. Moreover, Farghalli and his production manager, Mohammed Setohy, would restrict my movements on set, or my presence in some 'minimum crew' locations, although they allowed me on days where I did not think I would be coming (including a four-day trip to Alexandria, where I was generously housed in the same hotel as the rest of the crew). I managed to witness some glimpses of *Décor*'s postproduction, including a color test and a private showing of the first cut with Sara Abdalla (editor). However, I did not manage to gain access to the day-to-day work of editing, coloring, or mixing, which remain grey areas in my research. This inability to access the postproduction process on a regular basis may be partly my failing, but I have come to think that it is not an accident, since it is one of the most secretive aspects of film production to the overwhelming majority of crew members.

During preparations in *Décor*, I acquired the nickname which would follow me throughout the project, and which most accurately sums up my perceived position in *Décor*: 'Mr. X'. This nickname references a popular 1970s comedy starring Fouad el-

Mohandes, titled *X: A5tar Ragol fil-3alam* (*X: The Most Dangerous Man in the World*). The movie is a James Bond parody where the main character, Mr. X, is a world-renowned gangster with an endless capacity for fighting, disguise, deception, and seduction. When Farghalli started calling me ‘Mr. X’, immediately followed by his team and many crew members, he marshalled a pop culture reference to classify what would be otherwise unclassifiable: a doctoral candidate in anthropology on an Egyptian film set. In this respect, Farghalli performed a move well described by Armbrust (1996), whereby Egyptian popular culture is invoked in order to articulate problematic aspects of everyday life. By juxtaposing my presence with the idea of ‘Mr. X’, Farghalli implied that I behaved in a spy-like manner, since I asked all kinds of expected and unexpected questions, and took endless notes on people’s conversations and behavior. Farghalli additionally implied, half-jokingly, that I was ‘the most dangerous man in the world’, given all the information that I had accumulated – and indeed, it was a recurring theme in my everyday interactions in *Décor*¹¹.

In *Poisonous Roses*, by contrast, I was referred to as ‘el-Doktor’, which is what Fawzi usually calls me, because (in his own words) he respects my knowledge (*3elm*) and my culture (*thaqafa*). In this capacity, I was regularly asked by Fawzi to intervene in discussions concerning the film. When I started working with Fawzi, this deference was extended to me by various crew members, although I was never sure that I deserved it,

¹¹ On set, I was regularly told ‘*ekteb ya Hussein!*’ (‘*Write it down, Hussein!*’), which is a line in a popular play called *Shahed ma-Shafsh 7aga* (*A Witness Who Hasn’t Seen a Thing*). The main character, interpreted by the star Adel Imam, is interrogated by a judge in court. Imam is unable to give satisfactory answers, even though the judge every time asks Hussein, the court stenographer, to write down what Imam says. The judge’s injunction to write is slowly taken by Imam himself, who comically asks Hussein to write down his own disorganized testimony, thereby reinforcing the comical absurdity of the court proceedings. Imam goes on to ask the transcriber ‘*Ana esmi maktoub?*’ (‘*Is my name written down?*’), to which the transcriber answers a sober ‘yes’. Imam is temporarily satisfied until he comes back to ask the same question, partly in avoidance of the judge and partly to reinforce the Kafkaesque nature of Hussein’s writing. These two lines – ‘*Ekteb ya Hussein*’ and ‘*Ana esmi maktoub*’ – were regularly uttered in my presence on set, while I was jotting down notes in my notebook. To my mind, they had the double effect of establishing a mock pattern of interaction between me (Hussein) and the interlocutor (Imam) by reproducing the original lines, while reinforcing the distinctive absurdity of my writing in the eyes of my interlocutors.

especially when I did not have satisfactory answers to the movie's artistic or logistical dilemmas. My position in *Poisonous Roses* was much more involved than in *Décor*, both objectively and emotionally. I became a contracted worker, subjected to similar pressures to the other workers, and I started identifying with the film's success and its crew members' well-being. This bond is partly what drove my return to Oxford once the initial shooting was halted in December 2014, and it is what brought me back to Egypt in the summer of 2015. There is, in this sense, a significant difference between my 'participant observation' in *Décor* and in *Poisonous Roses*, where I was even more closely a 'participant', to the point where I even stopped taking regular field notes about this film project once I started working on all kinds of written/visual mediators with Fawzi. These writings and images, in addition to my own diary, lend a different insight into the experience of filmmaking than the one that I have had in New Century.

While I have held a different position in both projects, I was still seen as a young, male, upper middle-class Egyptian – a position which elicited certain expectations as well as certain behaviors towards me. I could not assume this position unambiguously: having migrated to Canada as a child, I had not incorporated the knowledge and the habits, the *habitus* in short, of the average young male Egyptian in my social class. To the interlocutors who knew my history, then, I was ambiguously positioned between being an 'Egyptian' and an 'Egyptianized foreigner' (*5awaga*), although I must have still seemed like any upper middle-class youth to those who did not know my biographical trajectory. Whatever the case may be, I thought of myself as a 'foreigner' (*5awaga*) in Egypt, but even when I strategically emphasized this narrative to get my interlocutors to explicate their thoughts, I was nevertheless systematically inserted in the local class/gender system with its attending expectations.

This recognition raises a number of issues, including how I define ‘class’, whether my definition is shared by my interlocutors, how I can claim knowledge about my own class position, and how I claim knowledge about my interlocutors’ position. While I cannot extensively address these issues in this introduction, I would argue that my knowledge of both my own and my interlocutors’ position arose in interaction. Of course, it would be disingenuous to deny the influence of my previous readings on Egyptian society (e.g. Armbrust, 1996; 1998; Abu-Lughod, 1993; 1997), as well as my conversations with my migrant parents and their friends. Still, I was made aware of my social standing when, for instance, my friends in New Century jokingly recalled the moment when I was introduced to them by Ahmad Badawy (general manager). The production assistant Hany Abdel Latif said that they thought I was to be taken ‘with a fork and knife’ (*bel-shoka wel-sekina*). This expression, which means ‘to take someone or something with great delicacy’, reinforces the class distance between me, the ‘refined’ upper middle-class man, and Hany, who in this metaphor would be the equivalent of a more popular utensil, the spoon¹². This anecdote illustrates the way in which my class position – and, by extension, my interlocutor’s position – was made present by a variety of diacritics in interaction: accent, clothing, gait, educational background, social capital, to name only a few. I could go on with similar anecdotes to illustrate my gendering as a young male, but the point is clear enough. The kinds of insights produced throughout this thesis are inevitably colored not only by my ‘professional’ position in the projects that I have followed, but also by my ‘personal’ position as a young, upper middle-class, Egyptian-looking male.

¹² On other occasions, Hany joked that although I had started by doing a doctorate, I could only get a technical degree (*diblom sanaye3*) now that I knew all the production crew members; that I started laughing and cursing like them, by implication. This metaphor reinforces the contrast between my class position, associated with a high cultural capital (as a doctoral student), and the production crew’s position, associated with low cultural capital (a technical degree, although all production crew members in New Century had actually achieved university degrees).

Overall, I would say, my access to the Egyptian film industry is a story of success by comparison with Ortner's experience in Hollywood, where her attempts to gain access to more or less important production companies were stalled by the executives' unwillingness to admit her into their everyday work (2010). Ortner argues that this kind of access is not necessary to do ethnography in American film industries. Instead, she proposes 'interface ethnography' as an alternative way to get to know the film world, through sustained interaction with public events held by the industry (e.g. festivals, book launches, or screenings). Part of my fieldwork falls in this category, since I have attended numerous Egyptian film festivals, screenings, and workshops in the course of my fieldwork, yet my experience in these settings was colored by my privileged access to the industry's production sector. Indeed, while my 'interface' contact with members of the industry were useful in ascertaining certain widespread representations among Egyptian filmmakers, they would never have been sufficient to be initiated into the concrete socio-technical *work* of film production, and the way in which filmmakers use technological objects. To quote Jenkins (1994: 434), my fieldwork has been an apprenticeship in which I have acquired 'habits of action for coping with reality' which, to some extent, are the ones shared by my interlocutors, beyond the narrow confines of an 'interface' contact. Given the specific kind of empirical interest that I had in this research, and given my interest in the ways in which technological objects were used in the work of commercial film production, my film-long participant observation in *Décor* and *Poisonous Roses* lies at the core of this thesis.

V. Summary and Scope

When filmmakers encounter working problems whose solutions they cannot evaluate with precision – i.e. which are ‘imponderable’ – they *mediate* this imponderability through various assumptions and mediators. They are thereby set to engage with ‘incoming futures’ transcending their immediate activity. In chapters 1 to 4, I will describe at great length the combination of assumptions and mediators marshalled by contemporary Egyptian filmmakers to engage in this mediation. I start by situating this study in the industry’s political economy (chapter 1), going on to describe its labor hierarchies (chapter 2) and socio-technical production operations (chapter 3), and ending with a detailed description of the everyday use of technological objects (chapter 4). Chapters 5 to 7 consider, in turn, three imponderable problems faced by Egyptian filmmakers: how to prepare and execute a shooting day (chapter 5); how to visualize the final film (chapter 6); and how to imagine the audience’s composition and reaction (chapter 7). I am not arguing that these imponderable problems are the only ones met by Egyptian filmmakers, but I did single them out because they have been regularly raised in my fieldwork. Their analysis, in turn, makes interesting contributions to existing academic discussions on the influence of media technologies on everyday experiences of work (chapter 5), the importance of intermediating images in media production (chapter 6), and the reification/recognition of work in complex media production processes (chapter 7). These minor contributions are intended to support the core theoretical contribution of this thesis, which is concerned with the mediation between the present and the incoming future of media production.

Ethnographically, this thesis will concentrate on workers in the commercial film industry in Egypt, in a historical period tracing back to the early 2000s. Thus, there are three major empirical limitations to this study and its theoretical claims. First, my ethnographic material is specifically concerned with *workers* and their *working activity*: I have little to say about these workers outside work, and I can only sketch scarce

observations about the way in which they think through concrete problems in non-working settings. This is very much an ethnography of work, and I hope to be excused (above all by my interlocutors) when I analytically concentrate on their lives as working lives. This is, however, a necessary simplification in order to highlight the core empirical and theoretical contributions of this thesis. Secondly, given the historical locus of this thesis, any mention of ‘technological objects’ is likely to mean *digital* objects. This is not to say that digital technologies are inherently better at mediating imponderable problems, or that these problems were not mediated in yesteryear’s industry. Indeed, I will extensively discuss the role of non-digital objects like paper in executing and visualizing the film (chapters 5 and 6), while remaining aware that the ways of dealing with imponderable problems have most probably evolved over the years. Without hard evidence on this evolution, however, I prefer to concentrate on my own fieldwork, which was conducted at a time where the majority of technological objects used to mediate working problems had been digital since the early 2000s. My claims about technological use are restricted to the digital era, although I offer some glimpses into earlier eras by relaying the wisdom of more experienced interlocutors in today’s film industry.

Finally, the material will be circumscribed to the ‘commercial’ film industry in postmillennial Cairo. By ‘commercial industry’ I mean, more specifically, the media industry that produces feature-length fiction films to be distributed in local and regional exhibition outlets. This includes ‘commercial’ movies, which are destined to be shown in local movie theatres and regional satellite television channels, as well as ‘independent’ (*mustaqill*) movies, which are destined for international film festivals. These very labels are contentious in Egyptian cinema circles (see chapter 1), which is why I use the term ‘commercial’ film production in an analytical sense, to encompass all these locally distinct categories. Since I have decided to examine everyday working activities in Egyptian film

production, I will have few opportunities to address the narratives of the film projects in which I have participated most extensively. Understanding that this omission will hinder one's comprehension at times, especially when I address 'artistic' aspects of filmmaking in chapters 6 and 7, I will provide a brief synopsis of *Décor* and *Poisonous Roses*, leaving the description of other movies in which I have been involved to the moment of their invocation.

Décor is a black and white psychological drama about Maha (played by the young star Horeya Farghaly), an art director working in a crass commercial movie with her art director husband, Sharif (played by experienced ladies' man Khaled Abol Naga). Maha is dissatisfied by the hurried pace and low quality of work in this film, yet Sharif tries to convince her to stick with it to the end. One day, while rearranging an item on set, Maha suddenly finds herself as the main character in her movie's world: a school teacher, mother to a nine-year-old daughter and married to a middle-aged cab driver, Mostafa (played by experienced character actor Maged el-Kedwany). Distraught by her passage to the movie's world, Maha keeps telling Mostafa that she is imagining this world, and that she is actually married to Sharif; that her mother, alive in Mostafa's world, has 'actually' passed away in Sharif's world. On another day, Maha finds herself back in her first world, married to Sharif, yet she is still distraught by her experience in Mostafa's world. She starts thinking that she might be mad. She keeps alternating back and forth between both worlds, even meeting a psychiatrist in both worlds (played by the pianist Mohammed Saleh). She remains undecided about which world is the 'real' one, no matter what happens. This central plotline, according to Ahmad Abdalla, is meant to highlight the variety of choices available to everyone (and every woman in particular) in their lives. Life is not black-and-white: it is made of many shades of grey (hence, in part, the choice of shooting *Décor* in black and white).

Poisonous Roses is the story of Taheya, a young working-class woman living in Cairo's tanneries district. Taheya (played by young actress Maryhan Magdy) is a toilet cleaner by night. Her opportunities in life are extremely limited, so she devotes all her energies to raising and caring for her younger brother, Saqr (played by young actor Ibrahim el-Nagari). When Saqr announces his intention to illegally migrate to Italy in order to find a better future for Taheya and her mother (played by experienced actress Safaa el-Toukhy), Taheya absolutely refuses to see him go away, and their relationship becomes strained as Saqr escapes her grasp little by little, while Taheya tries to imprison him little by little. One day, Saqr's best friend, Yehia (played by young actor Mohammed Berakaa), is injured by the toxic fumes in the tanning workshop in which they both work. He is quickly transported to a nearby hospital, where Saqr meets a middle-class training doctor, Nahed (played by young Lebanese actress Rémie Akl). Taheya is anxious by the double threat of Saqr's travel and his recent love interest. She will go to any length to keep him by her side. Since the movie is still in postproduction at the time of writing, I am not exactly sure how the film will end, yet it is very much a tale of possessive love among siblings, as well as a visually attractive look at the working-class world of the tanneries.

Both *Décor* and *Poisonous Roses* are, according to industry insiders, 'artistic' movies. The storyline in each movie is already indicative of their 'artistic' status, contrasting with Egyptian commercial cinema in recent years, which has tended to produce many more comedies and action movies. Without being generically exceptional, especially given their insertion in a much longer history of realist cinema in Egypt (see Armbrust, 1995), both *Décor* and *Poisonous Roses* are marked apart as 'artistic' (*fanni*) movies, a label with two different usages in the contemporary industry. On one hand, the label serves as a tool of professional 'boundary-work' (Ganti, 2012: 7), whereby movie projects with an artistic mission are deemed to have more refined objectives and crew members than

movies with a ‘commercial’ (*togari*) mission. While the artistic movie is evaluated according to its aesthetic appeal, the commercial movie is evaluated according to its ability to sell in local theatres and in Gulf-based satellite television channels – most notably, Rotana. All my interlocutors held this distinction, even though what is designated as ‘artistic’ is not always the object of a common agreement. For instance, *Décor* was vaunted by its production team as an artistic project, destined to put New Century on the map of international film festivals, but many ‘independents’ contended that it was a commercial project, by virtue of being produced with big-name stars in a mainstream production company.

On the other hand, the label ‘artistic’ designates a set of filmmaking practices associated with the physical appearance of the film product. Out of all the workers on the crew as I detail in chapter 2, only a limited set of ‘artistic’ workers – above all, the screenwriter, the director, the cinematographer, the art director, the stylist, the editor, and the composer – have direct authority over ‘artistic’ aspects in the film (viz., the actors, the lighting, the set design, the costumes, and the soundtrack). Executive workers like assistant directors, lighting technicians, and hair stylists are not professionally required to be concerned with the movie’s appearance. In this sense, they are only required to execute the logistical and technical work necessary to enact the artistic workers’ decisions. Many film industries hold a similar distinction between ‘artistic’ and ‘executive’ labor, most notably the French industry with its tradition of *auteur* cinema (see Darré, 2006). As I detail in chapter 5, execution is no less a creative exercise than the decisions made by artistic workers, yet it always occurs in the context of a particular relation of authority, between someone who decides over the film’s ‘artistic’ appearance and someone who does the work needed to enact this decision.

Chapter 1

The Shape of the Egyptian Film Industry

I. 'Hollywood on the Nile'

The Egyptian film industry is often described as the 'first', the 'only', or the 'most successful' film industry in the Arab world (Thoraval, 1975; Cluny, 1978; H. Amin, 1996; Shafik, 1998; G. Amin, 2000). This common perception is rooted in the industry's long-standing history of influence over the Arab-speaking Middle East and North Africa; a history which has earned it the sobriquet of 'Hollywood on the Nile' (Darwish, 1998: 12-13) or 'Hollywood in the Arab world' (Dajani, 1980). Several scholars have noted the impact of Egyptian cinema on popular culture in the Arab world (Armbrust, 1996; Shafik, 2007; Peterson, 2011). Yet, no ethnography has been produced on the Egyptian film industry, and very few studies have examined the production sites of Egyptian cinema (notable exceptions include Wassef, 1995; Shafik, 1998; Flibbert, 2001; Armbrust, 2004). This chapter is intended to situate this industry in its broader political economic context, while highlighting the importance of interpersonal relations in the industry's organization. As will become apparent, this interpersonal mode of organization and its corollary modes of apprenticeship ground the way in which workers operate in the industry and, by extension, the way in which they engage with imponderable problems.

The dearth of scholarship on Egyptian film production is not caused by a mere lack of interest, but by the relative difficulty of accessing the industry; a difficulty partly due to the industry's interpersonal organization. I insist on the word 'interpersonal', here, since the relations binding Egyptian filmmakers are never between anonymous individuals in an

open labor market. They are, rather, between individuals who either know each other or know each other via someone else (what is locally known as a *wasta*, pl. *wasayet*). In this sense, it is difficult to gain access to the industry – or even to understand its overall functioning – by ignoring the fact that you are almost never allowed in *unless* someone who ‘knows you’ allows you inside. I describe this interpersonal mode of organization in more detail in section IV, and I describe its attending model of apprenticeship in section V. Section VI will examine emic views on the industry’s organization; specifically, the divide between ‘commercial’ and ‘independent’ cinema. I argue that these labels are instances of ‘boundary-work’ (Ganti, 2012: 7) more so than analytically accurate statements about the industry’s political economy. To begin with, however, I situate the industry in its broader historical context in section II, while giving a sense of the industry’s current ‘crisis’ as experienced by my interlocutors in section III.

II. A Brief History of the Egyptian Film Industry

Setting aside early experiments in film production¹³, the emergence of an Egyptian film industry is traditionally dated to the mid-1930s. Several political and economic factors have supported this emergence: the relative freedom allowed to Arabic-speaking filmmakers under British colonial rule; the close intertwinement between cinema and

¹³ The early history of Egyptian cinema is traditionally narrated in three moments. In 1896, the Lumière Brothers exhibit their new invention in Alexandria and in Cairo. Then, some ‘foreigners’ try to make local films in order to attract a local audience uninterested in American or European movies shown to the colonial elite, but these ‘foreigners’ are commercially unsuccessful. At last, some ‘truly’ Egyptian actors, directors, and producers, including women pioneers like Aziza Amir, Asia Dagher, and Mary Queeny, make the first ‘truly’ Egyptian movies. Without entering in the arcane nationalist debate over whether ‘foreign’ filmmakers made ‘authentic’ Egyptian movies, one cannot speak of an ‘Egyptian film industry’ before the 1930s, since local film projects were too costly and too risky to be repeated. They relied on imported equipment, imported technicians, and European postproduction locations. Exhibition outlets, moreover, were too few and too little attended to warrant the emergence of a mass industry (Shafik, 2001: 38-40), although there were stories of early commercial success (e.g. Aziza Amir’s *Leila* (1927) or Mario Volpi’s *The Song of the Heart* (1932)).

nationalist expression following the historical student revolts in 1919; the influx of theatre actors/directors into film production; and the growing construction of exhibition spaces in Egypt (Shafik, 1998: 12-14). This construction reached an all-time high in the late 1950s, with over 400 cinemas built (Flibbert, 2001: 112). In addition to these factors, the industry's emergence coincides with the establishment of Studio Misr, which opened its doors in 1935 under the auspices of nationalist tycoon Talaat Harb¹⁴.

Studio Misr was initially a production company, yet it quickly became central to the whole industry by virtue of owning its own (still running) infrastructure. This included shooting studios and a complete postproduction facility, with all necessary equipment to edit, mix, and print analog films. Soon after its foundation, the Studio became a focal point for commercial film production, even as Egypt's average annual output reached a 'Golden Age' with 48 films/year from 1945 to 1952 (Shafik, 1998: 12). As Armbrust indicates, Studio Misr's contribution to the industry did not lie so much in financing film projects as it did in leasing shooting studios and, crucially, postproduction equipment to smaller production companies (2004: 84). Therefore, the Studio's importance was (and still remains) infrastructural. Armbrust continues: 'The 1930s and 1940s were important because it was at this time that the basic economic patterns of Egyptian film production were set. Except for the 1960s, when the cinema was nationalized, variations on these economic patterns persist.' (2004: 83) As I explain in section III, contemporary film

¹⁴ The Studio's establishment was part of a larger set of investments made by well-endowed local businessmen to raise Egypt's industrial capacity. Similar investments – which, incidentally, were made by Talaat Harb – include the establishment of Bank Misr, an important national bank in Egypt, and Misr Air (now Egypt's national airline, EgyptAir). These investments are tied to a wider political context in which a dysfunctional parliamentary democracy led by *Al-Wafd*, a liberal party supported by nationalist elites, was trying to override monarchical rule – and, by extension, British colonial rule – in order to establish Egypt's economic independence. In this context, Studio Misr seemed to be a logical extension to the liberal nationalist desire to establish independent local industries, in film production as in cotton production. Indeed, it is traditionally said that, in the 1940s, the film industry was only second to the textile industry in Egypt (Shafik, 2001: 26). Whether accurate or not, this statement points to the widespread assumption that filmmaking was a central economic activity in Egypt, on par with 'productive' industries like textiles and mining.

production bears evident commonalities with this Golden Age, yet the overall shape of the industry has been significantly modified by its nationalization.

From the early 1960s to the early 1970s, the state gradually took over most private production, distribution, and exhibition companies, while seizing all studios and laboratories including, crucially, Studio Misr. This nationalization was paralleled by the creation of two key institutions, which were devoted to developing the newly nationalized industry. In 1959, the High Cinema Institute (*el-Ma3had el-3ali lel-Sinema*) was established in Cairo, where it still remains a prime training ground for screenwriters, directors, cinematographers, art directors, graphic designers, editors, and sound engineers (all seven major programs in the Institute)¹⁵. The Institute is now part of the Academy of the Arts (*akadimiyyet el-fnoun*), which includes the Theatrical Arts Institute (*ma3had el-fnoun el-masra7eyya*), where some actors are still trained. The Institute is a central networking institution in today's industry, where successive generations of filmmakers make contacts that will later become useful when they work in the industry and employ 'Ma3had' friends. Earlier on, in 1957, a national film organization was created to promote the industry domestically and internationally. Although it undertook several changes in structure and in mandate in its early days, this organization was consolidated as the General Film Organization (GFO) in 1963 (Shafik, 2001: 28). The GFO's mission was, broadly, to 'promote' national film products, although it quickly became a source of direct funding for film production (Telmissany, 1995: 70). Film production in the 1960s was

¹⁵ There are no other public cinema schools in Egypt. In recent years, however, several private schools have emerged. These include the International Advanced Media School (IAMS, which grants a degree in conjunction with Cairo University), the Cairo Jesuit Cinema School (which was run by director Karim el-Hanafy until 2015), Raafat el-Mihi's school, Semaat's training workshops (run by documentarian Hala Galal), Zero Production's workshops (run by director Tamer el-Said), the American University in Cairo's film program (run by film scholar Malek Khouri), as well as a variety of acting workshops, most notably Khaled Galal's workshop in the Opera House, Ahmad Kamal's workshop, and the AUC's theatre program. The School of Fine Arts and the School of Applied Arts in Helwan University have trained some workers in the art direction field, including in costume styling.

concentrated in the ‘public sector’ (*el-Qeta3 el-3am*), even though some private companies were operating (with notorious difficulty) during this period (Flibbert, 2001: 115).

Nationalization was not an exceptional event, as several economic sectors were nationalized under Nasser – including textiles, mining, banks, and most famously, the Suez Canal Company. In film production as elsewhere, the overall effects of nationalization were twofold. On one hand, national economic interests were divorced from colonial ones, leading onto the development of an autonomous national economy under centralized state control. On the other hand, central control lead to an increasing reliance on state bureaucracy, which became too burdened – and too burdensome – to favor economic expansion, especially in the wake of Egypt’s defeat by Israel in 1967 (Khoury, 2010: 54-57). Today, there are some instances in which Egyptian filmmakers must interact with state bureaucracy – e.g. to get film permits, or to get the tax authorities’ approval on cinema tickets. The state, however, has only limited control over film funding or distribution. This was a major issue in the 1960s, when filmmakers were forced to deal extensively with state institutions in order to finance – and, crucially, to distribute – their movies.

After Nasser’s death in 1970, Sadat promoted a general program of economic liberalization, also known as *infitah* (opening). As a consequence of Sadat’s policies, state funding for film production dropped sharply and all of production, distribution, and exhibition were once more privatized. Since 1973, State-controlled institutions have been peripheral, by and large, to the financing of commercial film¹⁶. Some state-controlled institutions are still part of the industry’s landscape without directly intervening in production. For instance, the Cinema Industry Chamber (*8orfet el-Sina3a el-Sinima2eyya*)

¹⁶ The two notable exceptions were the Cinema Organization (*Gehaz el-Sinima*) in the EMPC as well as the Production Section (*Qeta3 el-Entag*) in the Egyptian Radio and Television Union (ERTU), which were both headed by Mamdouh el-Leissi until 2011, but both stopped funding movies by 2010. The Ministry of Culture administered a 20M LE fund for cinema in 2008, 2012, and 2015.

has been the official organism representing the interests of the film industry to the government via the Federation of Egyptian Industries since 1972¹⁷. Under the auspices of the Ministry of Culture, the National Film Institute (*el-Markaz el-Qawmi lel-Sinima*) is officially supposed to store and archive negatives of all Egyptian films, in addition to encouraging the development of a film culture through the Institute of Film Culture (*Markaz el-Thaqafa el-Sinima2eyya*)¹⁸. The Ministry of Culture organizes some important film festivals in conjunction with the Cinema Critics' Association (*Etti7ad el-Noqqad el-Sinima2eyyin*), including the Cairo International Film Festival (CIFF), the Alexandria International Film Festival for Mediterranean Countries, the African Film Festival in Luxor, the European Film Festival in Luxor, the National Film Festival (*el-Mahragan el-Qawmi lel-Sinima*), and the Ismailia International Documentary Festival. Interestingly enough, major studio facilities – including Studio Misr, Studio Nahhas and, more recently, the Egyptian Media Production City – remain under state control. Moreover, as Flibbert observes, 'the film industry in the Sadat era remained mired in a morass of state regulation and oversight' (2001: 123), a statement which may be extended to today's industry¹⁹.

All in all, one can distinguish five critical periods in the industry's history: from the 1890s to the mid-1930s, a series of filmmaking experiments were conducted by both

¹⁷ The Chamber is officially supposed to propose new legislation concerning the film industry, as well as to collect data on the industry's economy. In practice, the Chamber's influence on film-related policy is nearly inexistent, and the gathered data is largely inaccurate, by the public testimony of an ex-member in the Chamber's committee, prominent producer Mohammed el-Adl.

¹⁸ The practice, again, is said to be rather different from official mandates. I have heard several stories about the poor conditions in which the Film Institute maintains its archives: while it is supposed (by law) to store at least one negative copy from each Egyptian film, this copy is sometimes nowhere to be found, or only a positive copy is stored, or even a low-quality DVD. When I visited the Institute of Film Culture, I found an unevenly maintained newspaper archive (which is similar to the slightly better maintained, privately held archive at the Catholic Cinema Centre), as well as a small library. The Institute's screening room hosts private events, but it is superseded in programming quality and frequency by local European cultural initiatives (e.g. the Institut Français, the Goethe Institut, the Flemish Institute) or local private-run festivals (including the Catholic Cinema Centre Festival (*Mahragan el-Markaz el-Katholiki lel-Sinima*)).

¹⁹ While being mainly interested in regulations on American film imports in Egypt (e.g. remittance limits, quotas), Flibbert touches upon the crucial matter of taxation on ticket sales, arguing that 'state tax policy treated the industry more like a source of revenue than anything else. According to one observer [viz. Samir Farid, a prominent film critic], tax collectors were sent to cinemas every single day of the week to collect the state's share of receipts, including on weekends' (2001: 124). Such stories of tax burden on cinema revenue are still common in today's industry.

Egyptians and Egyptians of foreign origin, with mixed commercial results; from the mid-1930s to the late 1950s, the industry was consolidated into what is widely recognized as a ‘Golden Age’ of Egyptian cinema; from the early 1960s to the early 1970s, the industry was nationalized under Nasser and various state institutions emerged to promote national production/distribution; from the mid-1970s to the early 2000s, film production was once more ‘liberalized’ in parallel with a wave of economic policies commonly known as the ‘opening’ (*infitah*); and from the early 2000s until today, the industry witnessed significant changes in its financing patterns, as well as a wide transition to digital cinema technologies.

III. The Egyptian Film Industry in the New Millennium

A) Political economy: Notwithstanding some marginal cases, the contemporary film industry is overwhelmingly concentrated in Cairo and Giza, on the west bank of the Nile²⁰. This geographic concentration comes with very similar advantages to what has been noted in the case of post-1980s Hollywood (see Storper & Christopherson, 1987; Scott, 2002). While Hollywood and Cairo operate on vastly different scales, both industries are vertically disintegrated, i.e. the production process is not single-handedly controlled by large conglomerates. Under these conditions, geographical concentration eases access to information concerning new projects, makes face-to-face interactions in ongoing projects easier and more affordable, gives access to a large, more or less skilled working force,

²⁰ This has been the case since the 1930s, when early studios in Alexandria were overshadowed by the building of Studio Misr in Giza’s Haram neighborhood (Flibbert, 2001: 64). The High Cinema Institute, the National Film Institute, Studio Nahhas, and Studio Al-Ahram were built in the same area. Many production/distribution companies, as well as the biggest service-lending companies (e.g. casting, equipment rental, postproduction), have offices in Dokki and Mohandessin, two upper-end neighborhoods in Giza. Even the Egyptian Media Production City (EMPC), which was purposely built on the outskirts of Cairo, is located in 6th of October City, which is easily accessible by car from the Haram neighborhood.

eases access to the institutions regulating the industry, and provides a distinctive geographic milieu in which conventional landmarks are accessible to shootings (e.g. the Hollywood sign in Beverly Hills, the Qasr el-Nil bridge in Cairo). In the Egyptian film industry, geographical proximity is a prime advantage in maintaining the long-term interpersonal links on which the industry is based (see section IV).

The industry underwent two major changes in the early 2000s. The first was spawned by a specific event according to many of my interlocutors: the wildly popular release of *Ismailia Raye7 Gayy* (*Return Ticket to Ismailia*, 1997). The film, a youth-oriented comedy starring emerging comedian Mohammed Hneidy, reaped apparently unprecedented gains in domestic theatres and across the Arab world. This drove the industry (again, according to my interlocutors) in an era of prosperity on the back of light comedies and a new generation of movie stars (e.g. Mohammed Hneidy, Ahmad Helmy, Ahmad el-Saka, Mona Zaki, Mohammed Saad, to name some of those who are still active in the industry). This regained prosperity contrasted with the 1990s drought, when production outputs fell to historical lows²¹. This decline was gradually felt since the 1970s, yet it was more proximately deepened by the rise of Arab satellite television channels and the increase in television-oriented production²². TV production was heavily promoted since the 1960s in Egypt, but since it was entirely under the auspices of a centralized public sector company, there remained marked boundaries between national television production and commercial film production in Cairo. From the 1990s to this day, by contrast, TV serial drama production sponsored by large satellite television channels in the

²¹ Shafik reports that there were 18 films made in 1994, 25 in 1995, and 26 in 1996, by contrast with the average of over 60 movies per year in the 1980s (1998: 43).

²² Since the introduction of terrestrial television in the 1960s, television sales have been a standard source of revenue for Egyptian cinema (Amin, 1996: 102). Indeed, the industry quickly gained popularity across the Arab world by virtue of producing the largely rare Arabic-language film content on national TV channels in the region. Thus, the regional predominance of Egyptian films can be attributed to the absence of any significant competition, although political conflicts with neighboring nations as well as increasing imports of Hollywood productions had severely restrained the market share of Egyptian movies in the Arab world by the 1970s (Flibbert, 2001: 77-78).

Gulf has dwarfed the Egyptian film and television business financially. While national television remains a distinct institution, cinema and made-for-satellite-television have come to share common shooting and postproduction infrastructures, as well as a common labor market (also known as *el-sou2*, ‘the market’, in the industry’s insider language).

One may speak of a consolidated Egyptian media industry in this sense; an industry whose overall output has increased tremendously given the explosion in advertising and serial drama production since the early 1990s. This industry, moreover, has seen a boom in cinema production in the 2000s. I would doubt that this short-lived boom, ending within a decade, was solely caused by a sudden shift in audience taste towards comedy and younger stars²³. What coincided with increasing profit-making were the larger investments made in the form of distribution loans by major satellite television channels in the Gulf, including ART and Rotana, which have ceased to invest in production yet remain prime distribution outlets. These loans have taken two main forms according to the head producer in Film Clinic, Mohammed Hefzy. On one hand, there were ‘lump-sum’ deals where the distributor buys exclusive rights to the film in exchange for a negotiated sum; on the other, there were ‘minimum guarantee’ deals where the distributor gives partial loans to sustain production while guaranteeing the producer a certain percentage of exhibition profits. According to Hefzy, minimum guarantee deals are not very frequent in Egypt, and the evidence presented by the amount of post-2000s films whose negatives (or original copies) are owned by ART and Rotana suggests that Hefzy’s assertion is correct.

²³ There is widespread suspicion in the industry that this period of wealth was brought by ‘laundered’ money (*8asil amwal*). I have heard endless stories about how companies who received loans would steal part of the loan before using tighter budgets to actually produce a movie. For evident reasons, these stories are difficult to verify, yet one should know that they have been part of the industry’s lore since the 1940s, when ‘war profiteers’ who had made money in World War II purportedly started investing in the film industry to whitewash their gains (Armbrust, 2004: 81). Stories about the relations between the film industry and organized crime abound in other commercial film industries, including in Bombay (Ganti, 2004: 56-62) and Hong Kong (Martin, 2012a).

While distribution loans have been instrumental in financing the industry throughout the 2000s, television distributors largely stopped giving out loans by 2010 – an event whose explanation remains mysterious according to Hussein el-Qalla, one of Egypt's most experienced producers. The producer Sherif Mandour explained this event as an aftershock to the 2008 financial crisis: the crisis affected global advertising businesses in such a way that advertising revenues dropped dramatically in Gulf-based satellite channels, thereby limiting their investments into media production. Financing in today's industry, then, relies on local co-production (e.g. collaborations between Film Clinic and various local producers) or on personal investments (e.g. Walid el-Kurdi in New Century, or Ahmad and Mohammed el-Sobky, both of whom have been among the industry's most active financiers in recent years).

A second major change in the postmillennial film industry was technological. The advent of digital filmmaking technologies has made analog technologies in shooting and postproduction obsolete – including analog cameras (e.g. the ARRI 535), negative rolls, Moviola editing suites, as well as laboratories equipped to color and to develop negatives. This change is often narrated as an 'inevitable' and 'natural' development in the industry, in line with the technologically deterministic 'standard view of technology' in Western societies (see Pfaffenberger, 1992). As one might expect, however, the actual passage to digital technologies was far from being automatic. The earliest digital cinema technologies to be introduced in Egypt, in the early 1990s, were non-linear editing suites (e.g. Lightworks, Avid). According to the prominent editor Mona Rabie, the first digitally edited film in Egypt was Youssef Chahine's *Al-Mohager* (*The Emigré*, 1994), although the digital editing suites were more rapidly adopted in the television and advertising sectors. This early connection between digital editing and television/advertising can serve to explain why major postproduction companies in today's industry work with clients in all

media sectors, including commercial film. While digital editing suites were getting more and more popular, particularly with the spread of Final Cut Pro software in the mid-2000s, the Egyptian industry continued to use analog cameras until the late 2000s²⁴.

By the early 2010s, however, the ‘workflow’ from shooting to postproduction all the way to printing was digitized. The major remnant non-digital component is exhibition, since a large number of Egyptian movie theatres still use 35mm projectors (vs. the most common digital projection format, the DCP)²⁵. As I detail in chapter 4, this straightforward narrative of digitization is not compatible with the mixture of technological devices actually in use in the everyday work of film production. Moreover, the digital shift has not had a significant impact on the industry’s ownership structure: the narrative according to which digital technologies ‘democratize’ access to media production has not materialized except at the industry’s margins, while large sums of capital and access to distribution deals are still concentrated in very similar hands. To add another caveat, one should not assume that this digitization process led to a ‘dematerialization’ of

²⁴ As in other media industries, there was an intermediary period in the mid-2000s where analog material would be digitized by a telecine process, then edited on computer, then reprinted with an edit-decision list (EDL), which gave the points at which the originally digitized negative needed to be cut in order to produce the final film. This hybrid process disappeared by the early 2010s, when all film projects started to be shot with digital cinema cameras, including the ARRI Alexa and the Red Epic. Since these cameras produced already digital material, it was no longer necessary to digitize the analog negative with telecine, but simply to transfer the film’s files from a memory card to backup hard drives to computers equipped with postproduction software (including editing, coloring, video graphics), until a final film file is ready to be exported, printed, and projected.

²⁵ Since the 1950s, the infrastructure of postproduction has largely been under the control of state institutions, most notably Studio Misr (which was re-privatized in the early 2000s) and the Egyptian Media Production City (EMPC), which was built in the mid-1990s. Until the advent of digital postproduction, these two sites were the only places where one could edit, color, and mix a film in Egypt. These facilities are no longer used today, except to print 35mm movie copies destined to local exhibition venues, many of which are still not equipped with digital projection equipment, and to print in Dolby 5.1 sound (since they remain the only certified Dolby studios in Egypt). The marginalization of Studio Misr and the EMPC in the postproduction business was brought by several successive developments in the 2000s. When non-linear editing suites were introduced by Elixir (Kamal Gamal el-Din’s company, which bought Studio Misr in the early 2000s), Studio Misr and the EMPC were still central in coloring and mixing, which were still executed on negatives with analog methods by older technicians. As Mohammed Fawzi (mixer) recalls, however, the costs of local postproduction had become similar to the costs of better maintained non-Egyptian facilities, like Technicolor in London: therefore, larger productions in the 2000s resorted to foreign postproduction. By the late 2000s, digital coloring equipment (e.g. DaVinci, Luster, Base Light) and digital sound technologies (most notably Pro Tools) were imported by today’s largest postproduction companies, which made local postproduction affordable with a similar quality to the one found abroad. These technologies were not imported by Studio Misr or the EMPC, but by today’s largest postproduction studios (including Aroma and TimeCode).

filmmaking, *pace* editors who worked with greasy negatives on Moviola machines. Filmmaking was ‘rematerialized’, however, with a renewed significance attached to computers and hard drives as opposed to negatives and chemical solutions (this is more thoroughly discussed in chapter 4).

With significant changes in capital and technology, then, the contemporary film industry can be described as a collection of small- to medium-sized companies, acting as producers/distributors/exhibitors, each working with particular sources of funding – e.g. private capital, local coproduction, festival/state funding – and contracting their own cast/crew, renting equipment, securing shooting locations, and seeking postproduction services to make and sell movies on a project-by-project basis. This description applies as much to ‘commercial’ as ‘independent’ film production, although the latter tend to rely on state funding (e.g. the Ministry of Culture Film Fund) or grants from regional film festivals (e.g. the Dubai International Film Festival, the now defunct Abu Dhabi and Doha Film Festivals) as well as cultural initiatives like the Arab Fund for Art and Culture (AFAC). The myriad small-to-medium companies in today’s industry are mostly inactive: some exist in name only; others produce one movie without being able to survive beyond it. In the most recent Euromed Audiovisual report, a survey of 378 commercial films found that almost 75% of all films between 2002 and 2012 were produced by only 20 companies (2013: 52). This pattern may be attributed to a variety of factors, not least of which is the chronic unavailability of capital. One may argue, however, that the central reason for this unavailability is the tight local (and regional) distribution/exhibition market.

The distinction between production, distribution, and exhibition is formally recognized in Egypt, but these phases are effectively consolidated within a few companies bound by a *de facto* oligopoly over domestic exhibition, whose current shape can be traced

to the early 2000s²⁶. This market can set unattainable standards to smaller production companies – including, most notably, hiring stars. Until the late 2000s, the major production companies were major distributors/exhibitors – i.e. Al-Arabia, Al-Nasr, Al-Masa, Oscar, New Century, Misr International Films, and United Brothers. As a result, box office revenue was guaranteed to be integrally recovered by the same production/distribution company. There were notable exceptions to this pattern: el-Adl Group, the now defunct Good News, both Sobky companies, Hany Gerges Fawzi's company, and Film Clinic, who were able to distribute their movies on a regular basis without owning theatres. Though it is difficult to know why specific production/distribution companies have better success without owning theatres, I would argue that it is primarily about their ability to adhere to their distributors' demands²⁷, as well as their ability to cultivate interpersonal relations with them. From a producer's perspective, then, local exhibition and selling TV rights to satellite channels in the Gulf are the hallmarks of commercial success.

It is difficult to secure accurate data on the number of movie theatres in Egypt. The Cinema Industry Chamber reports an implausible 544 cinema halls (Euromed Audiovisual, 2013), but these records are outdated and ill-maintained. The average estimates of my

²⁶ The two largest cinema-owning groups are Renaissance (the distribution arm in Al-Arabia, headed by Isaad Younis) and the Trio composed by Al-Nasr (headed by the late Mohammed Hassan Ramzy), Oscar (headed by Wael Abdallah), and Al-Masa (headed by Hesham Abdel-Khalek). Smaller exhibitors include Dollar Film (a holding of Walid el-Kurdi, head of New Century Film Production), Misr International Films (headed by Gaby Khoury), and United Brothers (headed by Farouk and Walid Sabry). While these smaller exhibitors can technically take their own decisions on movies to exhibit, I have been told by experienced assistant director and now producer Safiy el-Din Mahmoud that they are pressured by larger conglomerates into projecting specific movies, which lends additional weight to the oligopoly over distribution.

²⁷ This might not be the only explanation to the success of non-distributing producers: one may argue that they are more successful because they are better attuned to the audience's tastes, although I would submit that this argument only means that they are better attuned to what the distributors think are the audience's tastes. The distributors' demands are above all about movie stars, and marginally the director, the screenwriter, and the storyline. This is true in local *and* regional distribution. I have systematically heard that it is impossible to distribute in the Arab world, especially in the Gulf (which accounts for 'the overwhelming majority of sales' internationally since the 1980s according to Flibbert, 2001: 87), without having a pan-Arab movie star (e.g. Adel Imam, Ahmad Helmy, Karim Abdel Aziz). This star system explains why 20 to 50% of a film's budget can be given over to two or three stars, who act as the central currency between producers and distributors.

interlocutors range between 200 and 250 individual screens in the whole country²⁸. The dearth of data on movie theatres mirrors a dearth of market research on movie audiences. Producers and distributors rely on what Ganti calls ‘production fictions’ to gauge their intended audience, or ‘truisms, axioms, and structures of belief about what is necessary for commercial success’ (2012: 12). One of the most common fictions, for instance, is that successful commercial movies need to appeal to a young, male, working-class audience, gathering in Cairo’s downtown cinemas on three major exhibition seasons: the Small Eid, the Great Eid, and the summer season beginning with the end of the academic year. This is not an entirely unreasonable belief: Cairo’s downtown theatres do attract large young male audiences on these occasions, but in my own experience, there is a significant contingent of families and young women as well, without mentioning the difference between downtown Cairo and the rest of Egypt, or between movie theatre audiences and television audiences. Production fictions, then, need to be taken with a grain of salt when it comes to describing the actual composition of movie audiences.

In the absence of reliable statistics on theatre or television audiences, I would argue (following Armbrust, 1998) that the audience’s composition is better estimated according to socioeconomic considerations. To take Cairo movie theatres as an example, a lower-tier theatre, located in ‘popular’ (*sha3bi*) neighborhoods like Bulaq or Shubra, where tickets cost between 10 and 20 LE, tend to attract younger, more male, more working-class audiences; a middle-tier theatre, located in a middle-class neighborhood like Dokki or Manial, where tickets cost between 25 and 40 LE, tend to attract middle-class families and young couples in addition to teenage audiences; lastly, an upper-tier multiplex, like the

²⁸ With an estimated population of 82 million Egyptians, this would put Egypt at a very low rate of one cinema hall per 330,000 to 410,000 people. This is a drastically low number in comparison with other countries in the region, let alone across the world, and it has been the case since the 1980s. As Shafik notes, West Germany counted 3664 cinema halls in 1983 with a comparable population to Egypt, which only had 267 halls in 1986 (1998: 40). Since then, the number of Egyptian movie theatres has decreased, especially with the massive closure of movie theatres in Upper Egypt and the Delta, while the overall population has only been increasing.

Nile Towers or the IMAX theatre in upper middle-class Sheikh Zayed, where tickets cost between 50 and 100 LE, tend to attract upper middle-class teenagers and couples. In addition to getting different audiences, each kind of theatre screens different content. As Armbrust remarked (1998), lower-tier theatres tend to screen re-runs and ‘popular’ action movies, while middle-tier and upper-tier theatres tend to only screen new releases, with a net advantage to Hollywood productions and, whenever possible, local ones. From an exhibitor’s perspective, Gaby Khoury (head of Misr International Films) told me that local productions are much more profitable because they are less taxed than foreign movies. However, these productions come in much lower numbers, which is partly why American movies dominate the domestic exhibition market according to him.

As Armbrust has suggested (2004: 83), the general pattern of production in the contemporary film industry remains similar to the one established in the 1930s. Flibbert describes it as follows,

Most of the producers in this period made only one or two films per year, revealing the disorganized, almost speculative nature of early production and its financing. Domestic and foreign distribution generally was undertaken by the individual producers themselves. A few of them, such as Togo Mizrahi and Studio Misr, led the way by their consistent efforts to make and distribute several films each year. But the vast majority of production was done by much smaller-scale operators, who either entered the business temporarily or failed to last more than a short while (2001: 111-112).

While today’s industry is similar to the 1930s, it still carries the weight of successive historical legacies, including extensive dealings with state bureaucracy (since the 1950s), a much larger pool of trained workers (since the 1960s), previously unavailable funding and distribution outlets in regional and international television channels (since the 1960s) and/or festivals (since the 2000s).

B) Crisis: When I asked my interlocutors about the current state of the Egyptian film industry, nearly all emphasized a sense of ‘crisis’ (*azma*). One should note that this sentiment is integral to the vocabulary of even the most successful industries, including classical Hollywood (see Powdermaker, 1950: 31). Still, it is interesting to examine the contemporary causes of the ‘crisis’ as my interlocutors put it. The suffering industry is sometimes set as a metonymy of the country’s political crisis since the 2011 revolution. While regular protests and the occasional curfew have disrupted the everyday work of production, it is difficult to judge the extent to which the revolution has genuinely affected the industry’s overall workings. One might think (correctly in my view) that few film companies are willing to invest in the current climate of instability, but I would dispute the assumption that this climate is primarily caused by post-2011 political events. I would suggest, instead, that the investors’ perception of economic uncertainty has increased as satellite television channels – which had been a major source of funding until the late 2000s – are unable or unwilling to pay distribution loans. This is confirmed by the fact that the industry’s most recent fall in production numbers occurred in 2009-2010, nearly a year prior to the 2011 revolution (Euromed Audiovisual III, 2013).

Political events are not the only causes invoked to explain the industry’s crisis. In a conference hosted by the film studies department of the American University in Cairo (AUC) in April 2014, prominent producers/distributors Gaby Khoury and Mohammed el-Adl agreed that piracy, overbearing state legislation, and limited distribution outlets constituted serious obstacles to the industry’s growth. These points deserve closer examination. To begin with, even though there are no accurate estimates on the scale of piracy in Egypt and in the Arab world, producers have been regularly complaining about illegal distribution channels, most notably VHS, VCDs, Internet uploads, and illegal television channels (Shafik, 2001: 28-32). In the AUC conference, Khoury estimated the

profits lost at around 30-40%, but the more serious issue is, as el-Adl raised it, the producer's inability to conclude lucrative distribution deals with a satellite television channel once a film is released in its pirated version (i.e. once it is no longer an 'exclusive'). In 2014, a New Century production was leaked online some days before its theatrical release, which was rumored to get Rotana to cancel a 20M LE deal on distribution. To give another example, on one of the last shooting days in *Décor*, the line producer Ahmed Farghalli was scouring through the Internet on his tablet, looking to see whether *Décor* was offered on download. I laughed and said that this is impossible, because we are still shooting, but Farghalli answered that some master scenes get leaked online from the video-assist monitor. Farghalli fell upon a website which indeed advertised the movie, but the hyperlink leading to the pirated video was not working. At that moment, I felt like Farghalli's tense search was temporarily suspended. This tension contrasts with the casual way in which Farghalli himself shared a streamed version of *Décor* on Facebook, a little over a year after its theatrical release, and well after its television distribution rights were sold. In effect, the practice of streaming or downloading movies is commonplace among workers in the Egyptian film industry, if not vital to their spectatorship habits²⁹. Piracy, then, is a more pressing concern to the producer seeking to sell rights to his movie than it is to the average worker in the industry.

Khoury and el-Adl also blamed the industry's crisis on state legislation and the tight distribution market in their AUC conference. The heavy permit-making process seemed like a rip-off to them, because they would pay extensive bribes in order to get permits without receiving any police protection in external shooting. Moreover, Khoury complained about the heavy taxation regime on ticket prices. Indeed, I have heard several stories about the lengths to which exhibitors will go to avoid taxation. Moreover, any

²⁹ Several 'independents' as well as High Cinema Institute students, in particular, have highlighted the importance of piracy in easing access to international releases that would otherwise be unavailable in Egypt, where the exhibition market is dominated by American and Egyptian commercial films.

producer who is not in league with the major local distribution/exhibition groups will face a problem of distribution. The two major conglomerates, Renaissance Cinemas and the ‘Trio’ composed by Al-Nasr, Oscar, and Al-Masa, own nearly two-thirds of the working movie theatres in Egypt by some estimates. While smaller production/distribution/exhibition companies may have enough contacts to negotiate local distribution deals, the oligopolistic situation is not ideal to them – at least, so long as they are not part of the oligopoly. To the so-called ‘independents’, this problem is even starker, since they do not necessarily have the contacts to effectively distribute their movies. As mentioned by Mohammed Samir (the head of the small company DayDream), it is as though there were two tight circles that never came into contact, one representing what he calls the ‘monopolistic’ industry, and an equally tight circle of people with little access to the monopoly. This lack of access to local distribution channels is, I would argue, the central political economic difference between the so-called ‘commercial’ and ‘independent’ sides of the industry.

What the independents dispute, moreover, is the star system established by the oligopoly – specifically, the fact that a movie cannot be distributed locally or regionally without a major male star, a luxury only affordable to medium-to-large productions³⁰. The main difference in the budget of these productions is star salary: a major male star like Karim Abdel-Aziz in *El-Fil el-Azra2* (*The Blue Elephant*, 2014) could command a salary rumored to reach between 5 and 10M LE in 2014³¹. For a major female star, the range was

³⁰ According to Euromed Audiovisual data, the average movie budget in 2008 ranged between 5 and 20M LE, while the range was between 7 and 13M LE by 2013. From sparse yet grounded evidence, I would suggest that the average range has now dropped to 5 to 10M LE since the late 2000s, while larger productions can still spend around 25-30M LE (e.g. in *El-Fil el-Azra2*, or *El-7arb el-3alamiyya el-Talta* (*World War III*, 2014)). Smaller productions can spend as low as 300,000 LE (roughly the budget in Hala Lotfy’s *Al-5oroug lel-Nahar* (*Coming forth by day*)), and as high as 1M LE (roughly the budget in Ahmad Fawzi Saleh’s *Poisonous Roses*).

³¹ Star salaries are not standardized in any sense, such that they are negotiated by different companies on an individual basis. This is why, in a story circulated about Mohammed Saad’s early days as a major movie star, Sobky would only pay him peanuts compared to the millions upon millions that he made by signing with el-Adl Group on one of his famous ‘Lembi’ comedies – which forced Sobky to pay him at a

less intimidating: Mona Zaki, for instance, is rumored to command a 1M LE salary. Thus, in a movie like *Décor*, led by a minor female star as well as two minor male stars, the overall star budget was around 2M LE, in a film whose budget was around 10M LE. This sets star salary at a 20% range in what was an average-sized production, though this proportion has been said to reach 30-50% in a larger production. For example, in *Sone3a fi-Misr (Made in Egypt, 2014)*, the star Ahmad Helmy was rumored to command a 10M LE salary, which is twice what was spent on the remainder of the film. In this context, as Shafik soberly states, ‘little remains for props, set, costumes, transport, and wages’ (1998: 27). Since oligopolistic distributors demand major male stars³², smaller producers are often unable to meet these demands and, by implication, they are unable to viably distribute their movies. While some negotiated arrangements exist (e.g. ‘artistically-oriented’ movie stars buying a share of profits with their own salary in order to ease the production process), the small producer is by and large destined to seek alternatives to the existing distribution structure (e.g. in regional and international film festivals), or subcontract to larger producers, or simply become inactive in the industry. This situation is expressed by the common sentiment that the industry’s crisis is, in fact, the ‘crisis of the small producer’ (*azmet el-monteg el-sa8ir*).

This industry-wide sense of crisis is matched by more personal crises in employment. As I will explain in section IV, employment is wholly dependent on

much higher rate once he returned to the series with the Sobkys. Given that salaries are paid in cash, the accuracy of these rumoured numbers can never be fully ascertained, unless one is party to the transaction. In this context, one has to rely on second-hand reports by production crew members – especially line producers, who work daily with the budget. Yet, even a line producer’s or a company’s records may not faithfully reflect the actual salary paid to a star, given the incentive to deflate salaries on paper in order to avoid taxation. Combined with a propensity to inflate a worker’s value in rumours, which can be cultivated by the worker himself in order to increase his market value, it is difficult for the researcher to maintain accurate counts on salaries in media production in general, let alone star salaries in particular. The more reliable estimates, in these circumstances, are approximate salary ranges or rough percentages of a star’s salary out of a film’s overall budget.

³² This pattern of male privilege is relatively recent in the industry’s history: from the 1940s to the mid-1960s, star female actresses like Faten Hamama and Shadia made higher salaries than their male counterparts, including Farid Shawqi and Rushdi Abaza (Al-Ashari, 1968: 75). In any case, a rigid star system has been a crucial feature in the local and regional distribution market since the 1940s at least (see Flibbert, 2001: 64).

interpersonal relations, either via intermediaries or vouchers for one's reputation. In this context, a worker who has limited contacts in the industry will be disadvantaged when it comes to getting work. Would his usual crew not find a project – a very common situation in the industry's current state – he would be forced to stay home. During fieldwork, I regularly heard complaints that the industry is 'no longer what it used to be', which is not an expression of nostalgia in the absolute, but a situated yearning for the early and mid-2000s, when the industry's labor market was active on a wider scale. Since the early 1990s, Egyptian filmmakers have sought employment in TV serial drama production or advertising in order to maintain a steady income when film projects were not available. This permeation between the film, television, and advertising labor markets is a striking feature of contemporary Egyptian media production. In a strictly institutionalist account, one might think that the production companies specializing in television serials and advertising would contract distinct workers, yet the interpersonal account traced below will explain why a filmmaker with good contacts can ultimately penetrate the television market or the advertising market, where salaries are more advantageous³³. Once appropriate contacts are established between sources of capital (i.e. production companies) and labor (i.e. cast and crew members, especially higher-ranked ones), the same cast and crew members working on a film project can work together in television/advertising.

IV. An Interpersonal Political Economy

Ganti's ethnography of Bollywood highlights 'the centrality of face-to-face interaction in the Hindi film production process' (2012: 191). Unlike in Hollywood, where professional

³³ I have no accurate estimates on salaries in television or in advertising, but I was told that the salaries in advertising tend to be double (per shooting day), while salaries in television are comparable with film production for most crew members, except that the length of TV drama shooting (12-16 weeks, vs. 3-4 weeks in films) makes income more regular (when the production company pays on time, that is).

intermediaries like ‘publicists, agents, or personal managers’ abound, Ganti argues that ‘personal relations and Bombay-based social networks serve as the mediating and gatekeeping force within the industry’ (2012: 193). This description is perfectly applicable to commercial film production in Egypt, where interpersonal relations, by which I mean direct relations between named individuals, are central in grasping the political economy of film production. I contend that all institutions in today’s Egyptian film industry, whether public or private, only work thanks to the interpersonal sway of individuals connected with other individuals. The most accurate diagram of the industry, then, would be a network where filmmaker-nodes are related to other filmmaker-nodes by virtue of having worked together or knowing someone who worked with them (a *wasta*). This networked labor market is characteristic of a number of commercial film production sites, including in Bombay (Ganti, 2012), in Dhaka (Hoek, 2014: 79-84), in London (Blair, 2001), in Paris (Darré, 2006: 127), and in post-1980s Los Angeles (Christopherson, 2008; Ortner, 2013: 160-163). What is specific to the Egyptian case is the extent to which this interpersonal logic permeates both public and private institutions, beyond the tightly knit circles of film production. For ease of description, then, I will sketch an outline of all public and private institutions with a significant impact on commercial film production in Egypt, but I enjoin the reader to bear in mind that these institutions do not interact in any systematic way. Rather, they are at the mercy of the contingent actions taken by more or less powerful individuals within and across institutional settings.

Figure 1 - The Permit-Making Process



A) State institutions and film permits: Aside from their limited role in film funding since the 1970s, the crucial intervention of state-controlled institutions in film production has been to issue various permits (*tasari*⁷, sing. *tasri*⁷). Ahmed Farghalli gave me a very useful diagram of the permit-making process in today's industry, which is reproduced in figure 1. I have little evidence to trace the history of this bureaucratic process, yet in living memory, what Farghalli describes is generally recognized as the process through which media producers have always had to go in order to secure film permits. That said, one can surmise that the permit-making burden over contemporary production has increased since the 1980s, with the growing reliance on external shooting locations in Egyptian cinema as well as the increasing hold of Mubarak's police state over the public domain. Shooting permits are only required in external locations: internal locations can be shot without permits, except when the camera is aimed at the streets, in which case a permit is required. Any time a policeman or a concerned citizen sees a camera in the streets or in a window, an ensuing interrogation can supervene, which can greatly impinge on the shooting schedule when crew members are not armed with the correct paperwork.

The contemporary permit-making process starts when a scenario (three printed copies and a CD copy) as well as a copyright lease by the screenwriter to the production company are sent to be approved by the Censorship Authority (*el-reqaba el-3ama*). The Authority produces an official letter destined to the Ministry of Interior as well as an approved scenario copy (*nos5a moraqqaba*) in print, with a seal. This copy needs to be produced to the Censorship Authority again, when the film is ready to be theatrically released, because the film cannot technically contain any additional scenes to what was approved in the original scenario. Therefore, the Censorship Authority has veto rights over any film to be made at two stages: first, when a scenario is submitted before shooting; and

second, when a film is submitted prior to theatrical release³⁴. Stopping a film at either stage is not uncommon: just while I was in Egypt, *A5er Romansi Banafsegi (The Last Violet Romantic)*, a film co-written by the famous director Yousry Nasrallah and young screenwriter Omar Shama, was stopped at the scenario stage although New Century had invested a great deal of effort and money in preparations. Likewise, the release of *Asrar 3a2eleyya (Family Secrets, 2013)*, a film by screenwriter-director Hani Fawzi, was delayed pending some adjustments to the language in the controversial film, starring an openly gay character.

After censorship approval, the next set of permits comes from the two major syndicates concerned with the film industry: the Film Syndicate (*neqabet el-sinema2iyyin*) and the Actors' Syndicate (*neqabet el-mehan el-tamsileyya*)³⁵. The Film Syndicate produces a work sheet (*lo7et 3amal*) with all the crew members contracted in the film, while the Actors' Syndicate produces a letter with all cast members contracted (i.e. stars and secondary roles). The work sheet and the cast letter include only syndicated workers, while non-syndicated workers need a special syndical permit to be included in the sheet. This special permit comes at the cost of a fine, whose price is said to be determined by the production's size rather than by internal syndical rules³⁶. Once the work sheets are

³⁴ While the first stage is crucial in obtaining shooting permits, the second stage is where, having assembled a film, negotiations over scenes, dialogues or sequences to include/to remove are carried out between filmmakers and censorship officials. A scenario cannot legally be shot without the Authority's approval, since permits given by the syndicates or the Ministry of Interior are contingent upon it. Likewise, a film cannot be legally shown in domestic theatres unless it has received censorship approval. When a film is referred by the Authority, it must strictly follow all recommendations made by the censors in order to be released. While the reasoning behind the censor's decisions (and particularly rejections) has been a constant source of perplexity to many filmmakers, three key elements appear to be 'undesirable' content to the Authority: bad language (including swearing, blasphemy, etc.), sexually explicit images, or anything that might hurt 'Egypt's reputation' (Saad, 1998).

³⁵ The Musicians' Syndicate (*neqabet el-musiqiyyin*) is marginally involved in film production, but the production company needs to pay a fine when the musical composer hired on a project is not a syndicated member, and the syndicate needs to issue its approval on the film's soundtrack prior to its theatrical release. Otherwise, the main permit-providing syndicates remain the Film and the Actors' Syndicate.

³⁶ As I was told by Ahmed Farghalli and Mohammed Hosny (accountant), a project with a major movie star like Ahmad el-Saka will be fined more heavily than a project with a younger cast and crew, even when the number of non-syndicated workers is identical. Adherence to the relevant syndicate is still encouraged by production companies in order to avoid paying additional fees. This adherence is not easily

complete (and all fines paid), the Film Syndicate and the Actors' Syndicate issue a letter addressed to the Ministry of Interior. This letter is sent to the Ministry along with the Censorship Authority's letter, a letter with details about all shooting locations envisaged in the film, and a police report (*eqrar shorta*) where the company certifies that the film will in no way impinge on police or army functions. Based on these documents, the Ministry of Interior produces a permit addressed to the 'governorates' (*tasri7 el-da5liya lel-mo7afazat*), which is used, in each province, to get a second permit from the Prefecture (*modireyyet el-amn*), which is given to the appropriate police department where one is intent on shooting, along with a specific list of shooting dates and locations in the area administered by the department. The same nested hierarchical process occurs in each province: the Ministry of Interior permit is used to get a Prefecture permit which, in case of external shooting, is used to get a police department permit³⁷. Without these permits, one is not legally allowed to shoot in external locations, and while in practice a Ministry of Interior or Prefecture permit may suffice, the police department permit offers better protection against local interdictions from shooting.

With the great bureaucratic burden presented by the permit-making process, one can easily imagine why larger companies have workers specializing in securing permits. These workers, who are generally part of the production team, do all the legwork necessary to carry the appropriate set of papers from one state administration to the next,

accessible to all workers: while syndicate membership is guaranteed to High Cinema Institute graduates, several lower-end crew members have assured me that they were asked for hefty bribes in order to enter the syndicate, even though they fulfill the basic conditions of entry.

³⁷ In areas administered by the Border Guards (*7aras el-7odoud*) or Military Intelligence (*el-mo5abarat el-7arbeyya*), including all Egyptian coasts and airspace, a special permit needs to be produced by these authorities, and addressed to the appropriate police department, in addition to the Ministry and Prefecture permits. Special permits are also addressed to the appropriate police department by the Ministry of Antiquities, the Ministry of Tourism, or the Ministry of Islamic Endowments in sites protected by these ministries (e.g. the Pyramids, the Marriott Hotel in Zamalek, the Sultan Hassan Mosque). Even with all state-sanctioned permits, I have heard that some productions are halted by local police officers when they are dissatisfied with the bribe that they feel entitled to get. In more popular areas without regular policing (e.g. el-7attaba), local 'thugs' (*baltageyya*) can solicit additional money in exchange for protection in the neighborhood.

while being knowledgeable about which specific individuals in each institution will sign what paperwork in exchange of what payment. Indeed, I have seldom heard of paperwork being deposited at an anonymous office until it is signed by some institutional mechanism. All accounts are about a permit-seeking worker who literally runs after the designated signatory, in person, partly to reinforce nepotistic links, but partly also to accelerate the overall process, which can take an inordinate amount of time by the production's overall schedule if it were to simply hinge on a bureaucrat's willingness to sign. Given the burdensomeness (and the informal price) of permit-making, several documentarians and low-budget productions shoot without permits, but they are liable to be interrupted by local police officers and citizens. Since larger productions are unwilling to take this (costly) risk of interruption, they abide by existing permit rules to the best of my knowledge.

B) Private companies and hiring practices: In the industry's insider talk, all private companies are associated with specific individuals. This is the case with production/distribution/exhibition companies as well as companies providing specialized production services (e.g. casting extras, renting props, renting equipment, postproduction, marketing, and so on). Thus, Al-Arabia is known as 'Isaad Younis' company', and Oscar is known as 'Wael Abdallah's company'. InCast, a major casting agency, is called 'Hazem el-Aswany's company', and TimeCode, a major postproduction company, is called 'Abul-Saad's company'. This pattern is indicative of the industry's interpersonal workings, where a production company seeking to cast some extras is better described as Ahmad Badawy (general manager in New Century) asking Hazem el-Aswany to get a deal on extras. If el-Aswany's deal is not suitable, Badawy may try to get a better deal with Sayyed Rashed, or Ibrahim Safina, or Ahmad Tammam. All these 'casting agents', or *regiseirs*, do not necessarily have established companies, but they have sufficient manpower and contacts to

service any production team with extras. Ultimately, the institutional description (the production company hires a casting agency) is less accurate than the interpersonal one (Badawy hires el-Aswany in the name of New Century). While there is a clear sense in which some service-lending companies are larger and more influential than others, this size advantage is based on interpersonal links with production companies as opposed to institutionalized ones. To give a concrete example, TimeCode was only created in the mid-2000s, yet it quickly rose to prominence in the industry partly, as one may argue, because it offered the latest digital postproduction equipment with highly qualified technicians, but more importantly because the company was headed by Mohammed Abul-Saad. As sound mixer Mohammed Fawzi told me, Abul-Saad had acquired a long-lasting reputation in the postproduction business in the 1990s, all the while cultivating personal links with several major players in the industry, which explains his meteoric ascension to the top of the postproduction business.

While I cannot dwell on each major company extensively, I wish to give a brief idea of the way in which companies entertain, in effect, interpersonal links through each project. I will take New Century Film Production as a concrete example, since it is the company where I have spent most time, and I will focus on the production and distribution of *Décor*, since it is the film that I most closely followed. With enough evidence, however, I submit that this interpersonal description could be extended to the whole industry.

The current owner of New Century is Walid el-Kurdi. His father, Ismail el-Kurdi, founded Dollar Film in 1949. According to Gaby Khoury (and as confirmed by Flibbert, 2001: 154), Dollar was among the biggest distributors in the 1950s, along with Orient Films, which was founded by Khoury's father, Hanna Khoury. In Bollywood, Ganti notes that kinship networks 'provide a source of personnel, a site for training, and a form of organization for the film industry' (2004: 55). This description is applicable to Egypt,

where one can regularly find filmmaking families in various crafts. To give a personal example, my mother's family – the Telmissanys – are famous for the director Kamel Telmissany, pioneering documentarians Abdel Kader and Hassan Telmissany, as well as the star cinematographer Tarek Telmissany (who was initially trained by his father Hassan) and the on-set photographer Khaled Telmissany, who was trained by – and works with – Tarek. Networks of kin, here, are a 'source of personnel' and a 'site of training', whereby workers growing in a film household gain insider knowledge allowing them to navigate the industry. I would argue, however, that this advantage is not structured specifically by kinship networks, but more broadly by the interpersonal links cultivated within a given family, and between the family and the wider industry. Being affiliated to the 'guild' of filmmakers, in this sense, is more important than the nature of the affiliation (by kin or, say, by training in the High Cinema Institute). Therefore, kinship *per se* is hardly a 'form of organization' in the industry, except insofar as some filmmaking families control certain core production/distribution/exhibition companies over generations³⁸.

Since Walid el-Kurdi is rarely present in Cairo, Ahmad Badawy makes all daily decisions in his name and with his approval. Badawy has employed three line producers in 2013-2014: Ahmed Farghalli, Souka (Ahmad Youssef), and Mostafa Azqalani. Farghalli worked with Badawy when he was still a line producer in Good News, when they were both assistants with Nabil Sobhi, a well-known line producer (who incidentally manages studio rentals in Studio Misr, where New Century regularly rents studio space). Souka, for his part, worked as a production manager in Badawy's first film as a line producer in New

³⁸ Many film companies are passed down a single family over generations: Al-Nasr was inherited by the late Mohammed Hassan Ramzy from his father, Hassan Ramzy; Hany Gerges Fawzi's company was inherited from his father, Gerges Fawzi; Misr International Films was inherited by Gaby Khoury from his uncle, the illustrious Youssef Chahine; el-Adl group is organized by el-Adl family (the older generation including Mohammed, the late Sami, and Medhat); the Sobky companies, who were initially inherited as a single company by Ahmad and Mohammed el-Sobky from their father Hassan, now act as three separate companies managed independently by each brother and Ahmad's son, Karim el-Sobky. Lastly, as I indicated above, Dollar Film was inherited by Walid el-Kurdi, who founded New Century Film Production in 2004.

Century, *Geddo Habibi (My Dear Grandfather, 2011)*. Mostafa Azqalani had worked as a line producer in New Century since its establishment in 2004, and he has had strong relations with Walid el-Kurdi in person. Each line producer works with a team composed by relatives, friends, and/or people with whom they have worked in the past and/or have been recommended by other line producers. When *Décor* was initially proposed by Mohammed Diab and Ahmad Abdalla, Badawy accepted on the condition that Horeya Farghaly (the star actress, who had collaborated on several New Century productions) is included in the project. Diab had previously worked with New Century on the movie 678, while Abdalla did not know Badawy, but was presumably recommended by Diab, as well as being known as an ‘artistic’ director. After stars Khaled Abol Naga (with whom Abdalla worked on several projects) and Maged el-Kedwany (who is well-known as a character actor in the industry) were added to the project, Badawy reached a deal with Abdalla and Diab on *Décor*.

Ahmad Abdalla brought Omar el-Zohairy as an AD, Tarek Hefny as a cinematographer, Asem Ali and Nihal Farouk as art directors, Salma Sami as a stylist, Ahmad Saleh as a sound engineer, and later his sister Sara Abdalla as an editor. Ahmad Abdalla had worked with Zohairy, Hefny, Farouk, Saleh, and Abdalla on previous projects. Asem Ali came highly recommended with his work in Nadine Khan’s film, *Harag w-Marag (Chaos and Disorder, 2012)*, while Salma Sami came recommended as Nahed Nasrallah’s assistant (the most famous costume designer in Egypt). Each crew member, in turn, brought their own assistants. Zohairy brought Jaylan Auf (movement script), who came recommended by Ahmad Abdalla personally, and Mariam Bagoury (costume script), who came recommended by Kawthar Younes (who had previously worked with Omar’s mentor, Wael Mandour). Kawthar was supposed to be the costume script in *Décor*, yet she was unable to commit to the movie given her own scheduling

issues, which is why el-Bagoury was brought along. Zohairy also hired Ahmad Hashem (*regiseur*, Hazem el-Aswany's assistant), with whom he had worked previously; Hefny brought Hossam Mohammed (focus puller) and Mahmoud Morsi (gaffer), who worked with him on previous movies and commercials; Ali brought his usual assistant, Mohammed Ezzat, as well as his usual builder, Hussein Wezza, while Farouk brought a prop master with whom she has worked previously, Mohammed Seyaha. One could go a further layer down the hiring cascade, by describing how the gaffer's crew, or the grip's crew, or the prop master's crew were hired based on interpersonal links. I could also indicate how *Décor* was distributed in Renaissance Cinemas in addition to New Century cinemas by appeal to Isaad Younis' good relations with Walid el-Kurdi. I will spare this detail in order to clarify some basic assumptions in this interpersonal hiring network.

First, working relations in the Egyptian film industry are based on kinship, friendship, or sustained interaction at work. This is very clearly the case in Ahmad Abdalla's key crew, but it is also true in the production team, the gaffer's crew, the grip's crew, the chief builder's crew, and so on. When personal relations are not direct, so to speak, they are made by a *wasta*, an intermediary individual. While the term *wasta* has a somewhat pejorative, nepotistic connotation in Egypt, the actual role played by various interceding parties in making hiring decisions is crucial, especially when hiring someone with whom one has never worked previously, or who is unknown in the 'job market' (*el-sou2*). This was the case with Mariam el-Bagoury in *Décor*, who was recommended by Kawthar Younes. This was presumably the case when Ahmad Abdalla was introduced to New Century via Mohammed Diab, although I have no record of their initial meetings. In the few cases where a worker is hired without prior connections or intermediaries, one is hired based on 'reputation' (*som3a*). While *som3a* is straightforwardly equivalent to the English word 'reputation' in its ordinary usage, I am inclined to understand the Arabic

term in its literal meaning – as ‘something that is heard [about someone]’. The physical circulation of word of mouth about one’s work is vital to the creation and sustenance of one’s reputation in the industry, which (as I have insisted so far) can be conceived as a chain of interpersonal connections.

Second, nearly all crew members are hired on a contract-by-contract basis. Except the general manager, accountants, some production crew members, and maintenance staff, no one is permanently hired by a production company. This contract system could seem to suggest that crew members circulate freely in an open labor market, but the practice is different because hiring is nested in an implicitly accepted order of decision-making. The producer will hire the director, then the director will hire his AD, who will in turn hire his continuity script supervisors and his second assistants. Likewise, the director will hire his cinematographer and his art director, who will in turn hire (among many crew members) a gaffer and a prop master, who will in turn hire their first and second assistants, and so on. Hiring decisions are ultimately submitted to the producer’s will – he is the one paying after all. As I have witnessed in practice, however, hiring decisions are submitted to each team’s head or sub-head, even when it comes to replacing crew members who decided to leave – or were made to leave – the project³⁹. Only when Ahmad Badawy had a financial or personal motive to reject a given candidate (*tarshi*)⁷ did he ask the concerned hirer to amend his/her first choice. Financial motives center on salary negotiations⁴⁰, which can

³⁹ Although crew members can sign contracts, these contracts are not binding in practice when a crew member comes to be replaced. More than occasionally, crew members are either made to leave a project or leave of their own volition. In the first case, a major mistake in one’s job may be in cause (e.g. a production assistant arriving late on set, a prop assistant losing a continuity prop, a camera technician breaking a camera lens). In the second case, schedule conflicts with other (often more profitable) projects can be in cause. Since contracts are not binding in practice, financial compensation after leaving a project is not subject to any straightforward rules. In principle, the crew member should be compensated for his last days of work, but this very much depends on the gravity of the mistake or the producer’s willingness to pay.

⁴⁰ The accepted notion among producers (and production crew members) is that all salaries are based on previous salaries within a given company. This means two things: 1) that augmentations can only come at the price of individual negotiation or a simultaneous raise in rates within a given profession (which is difficult to accomplish in the absence of effective unions, yet has produced results in tightly-knit professional networks, like cinematographers trained in the High Cinema Institute); 2) that each company pays a different

lead to severe frictions between workers and companies, while personal motives include bad working experiences with the candidate, or a bad reputation.

Thus, hiring decisions are primarily based on previous working experience with a candidate *or* on a candidate's recommendation by a trustworthy party (*wasta*) *or*, in rare cases, on the sheer weight of the candidate's reputation (*som3a*). I have never witnessed any hiring on a project – or even in a company – that does not fall in one of these three cases, which means that the impersonal process of 'C.V. hiring' in an open labor market is entirely absent in the Egyptian film industry. Candidates either have a personal contact with their hirer, or they know a person who knows their hirer, or they have a list of achievements such that their name circulates widely enough in the industry to be hireable. This hiring pattern – i.e. nested contracting based on interpersonal connections – has consequences for the way in which workers are brought into the industry, the way in which hierarchical superiors are considered, and the way in which career paths are traced (see chapter 2).

Since hiring is so personalized, novices tend to remain under their initial contact's patronage to gain additional contracts until s/he makes more contacts in the industry. The general perception is that crew members (especially younger or less powerful ones) are under constant threat of never working again if they do not abide by their superiors' every desire⁴¹. Thus, a crew member's promotion may be encouraged or hindered by immediate

rate for every cast/crew member, such that salaries are never standardized (except, as I hinted earlier, when entire professional networks collectively agree on a common price). Frictions arise in individual negotiations, where a price proposed by a crew member is unacceptable to the production given their budget or, in some cases, given the rates proposed by their company. Some cross-industry standards prevail in exceptional cases, like set building craftsmen, who are paid by the day. In 2014, a carpenter received 125 LE/day, while a lead carpenter received 175 LE/day. This standardization is unusual in the Egyptian film industry, where salaries are largely negotiated between the line producer and whichever contracted crew member or company.

⁴¹ The inequality inherent in this system of hiring leads, in some cases, to what people in the Egyptian film industry refer to as *ta3ris* – literally, a vulgar term meaning 'to prostitute oneself', yet practically used to designate unwavering approval and support of any superior who has any power over hiring in a project. I have very frequently heard that *ta3ris* is part of the industry's *3orf*, or customs, and I have even witnessed

superiors, who might promote their assistants as they themselves get promoted, or maintain their assistants in inferior positions. As Mariam el-Bagoury once told me, her reputation in the industry will rise if she gets solicited outside the team where she initially trained. This is a logically deducible statement: if the worker in question is hired by another team, it is either because she is held in high esteem by her superiors (who recommended her in another project), or because she has already built a solid enough reputation to get solicited. As I explain in chapter 2, this hiring pattern is not maintained for strictly autocratic or nepotistic reasons: it is justified by the relative skill (*shatara*) brought by each worker to his task, the higher skill being the better valued in the industry's hierarchy. That said, evaluations of skill are not neutral, since their most immediate consequences are brought to bear by the very superiors who control hiring. As Darré points out in the French film industry, 'The mode of recruitment, by cooptation at each level – of creative collaborators by the director; of assistants and trainees by the department heads – allows for the reproduction of the group and its ideology. What is selected, at the level of entrant trainees, is above all the "adequate habitus" (...).' (2006: 127)

V. Apprenticeship

All novices are not socialized in like manner. My own journey into the Egyptian film industry is atypical: I gained access to New Century as a researcher, and what I have learned about the industry is based on the interpersonal connections that I have forged thanks to this status. On my first day on an Egyptian set, I sat right next to the director Ismail Farouk with Ahmad Badawy to my side and the star actress nearby. I was brought a

behavior overtly characterized as *ta3ris* – for instance, a makeup artist constantly complimenting a female star on her looks, because he purportedly knows that she might hire him on later projects.

fast food meal and a soft drink, and I freely conversed and joked with the director. Needless to say, this is not the usual way in which new crew members are introduced to a set: this was the product of my position as Badawy's friend, as a 'guest' on set, and accessorially, as a doctoral researcher. In the industry's status hierarchy, I was conceptually at the top, while most novices start training at the very bottom. My apprenticeship did not start when I initially went to the field, however, because I have had an early acquaintance with basic principles of filmmaking thanks to my parents, both of whom are film scholars, as well as my mother's family, the Telmissanys. While I cannot claim to have been extensively trained by my family, as some filmmakers are in Bombay (Ganti, 2012: 199-200), this prior knowledge was certainly useful to my research.

What is probably common to my own learning experience and that of novices is the personalized, hands-on nature of training in the Egyptian film industry. In *Décor*, I was taken under the wing of Ahmed Farghalli (line producer) and Mohammed Setohy (production manager), who would not only generously answer my questions, but also guard me against any serious misstep, and bar my access to certain crew members in sensitive times. Renad Tarek, the second assistant director in *Décor*, was closely helped by her immediate superiors, the scripts Mariam el-Bagoury and Jaylan Auf and, ultimately, by the AD Omar el-Zohairy. Hany Morsy (lighting script) was much more silent and distant on set, and his interactions were centered on helping his boss Tarek Hefny (cinematographer) and his cinematography crew. Morsy had previously trained in cinematography at the New York Film Academy, and this experience made him more knowledgeable about the technicalities of film production. Tarek, on her part, was willing to admit her ignorance on many aspects of filmmaking: she would sometimes even ask me about production or cinematography. Still, for Tarek, Morsy, and I, *Décor* was our first working experience in a feature-length movie in Egypt.

Any novice who learns to become a filmmaker acquires a particular *habitus*, specific to his position within the industry's division of labor, and a particular *savoir-faire* (or 'know-how'), specific to his craft. These French notions are respectively borrowed from Bourdieu (1977: 72-73) and the French school in the anthropology of technology (Martinelli, 1997; Chamoux, 2010). They designate, in turn, incorporated pre-dispositions to act, organized around interpersonal, master-to-apprentice transmission in 'real-life' learning situations. While I use the notion of *habitus* in a more wide-ranging sense, to describe the incorporation of general dispositions to behave in a particular way on set or with workers in the industry, I use the notion of *savoir-faire* to describe the specific kind of practical knowledge incorporated by workers in the socio-technical exercise of their craft. This *habitus* and *savoir-faire* narrow down the scope of possibility envisaged by social agents in the face of imponderable problems or, as the case may be, contingent tasks. When, to give a concrete example, gripping technicians lay down dolly tracks before a shot, there is a certain automaticity with which their bodies carry and lay out tracks in a well-defined division of labor between the key grip (who measures the track's flatness) and his assistants (who arrange the tracks according to the key grip's commands). Grips are not, therefore, at the mercy of uncertainty or even imponderability: they enact a certain *habitus* of laying out tracks without affecting surrounding workers on set, as well as an embodied *savoir-faire* of the 'right way' to do these things⁴². As I became increasingly familiar with the grips' technique, I could appreciate the effort and skill invested in their work, but since 'a technique is never known until one has acquired its experience by a

⁴² It is interesting to note that the apparently 'technical' operation of laying dolly tracks (setting the track with the orientation and length desired by the cinematographer, measuring its evenness, stabilizing it with door stubs) is materially tied to representations about how camera movement needs to be 'smooth' (*Zaraka salesa*). The key grip's skill lies precisely in laying tracks in such a way as to 'smoothly' produce trackin/trackout/sidetrack shots. I have heard grips in *Décor* complaining that their tracks are not very smooth, because many tracks are imported as second-hand equipment from Europe, which is why they like to reserve 'better' (read, newer and smoother) tracks to 'quality' productions like *Décor*. In this sense, the apparently purely technical operation of laying down a track is compounded by a variety of factors, including the quality of equipment, the grip's *habitus* and know-how, as well as common representations concerning the smoothness of camera movement.

more or less lengthy apprenticeship' (Sigaut, 2009: 42), I can only give the faintest hint about the way in which this skill is incorporated, in-habited, over time, in the course of a grip's life.

This pattern of master-to-apprentice training is common to the direction, cinematography, art direction, styling, and sound engineering teams. Trainees in these teams tend to have prior formal training in film schools, most notably the High Cinema Institute, but novices in gaffing, gripping, camera, décor, or video-assist operations are most often exclusively trained by their sub-team heads, without any previous experience or education needed. In its initial stages, training involves mere observation of how a set works and how lighting, gripping, or camerawork is done. As I was told by Mahmoud Morsi (gaffer), his novices are first trained by keeping next to the equipment car: they learn the names of every single piece of equipment. Later, they are allowed to carry the equipment in and out of the set (thereby becoming second assistants) and eventually, they are allowed to rig lights (thereby becoming first assistants), and perhaps even to carry the cinematographer's directives (thereby becoming a best boy or a gaffer). In addition to being personalized, this kind of training is *embodied*. I have already mentioned how grips enact their know-how on set, but I can only suggest how gripping trainees gradually acquire it – through observation, through familiarization with gripping equipment, through adjustments and readjustments made in conjunction with the key grip, through the wide variety of camera motions with which they grow acquainted. In a way, this embodied enskilling can be mapped onto the gripping team's hierarchy: trainees seem to hang out near equipment, watching what their superiors do; gripping assistants pack, carry, and unpack equipment, while remaining attentive to the key grip's directives; and the key grip directs the whole operation with the assurance of a masterful technician, an *osta*. Although there is more than meets the eye in this immediate bodily action, including sparse verbal

transmission to novices and emerging training situations when equipment fails on set, the embodied, personalized transmission of *savoir-faire* in the gripping team provides a good example of apprenticeship in all teams in the Egyptian film industry⁴³.

The lifelong extension of this kind of apprenticeship is difficult to grasp within a single fieldwork stint. However, one can approximate this temporal extension with reference to specific career paths. Immediately after *Décor*, Renad Tarek went on to work as a continuity script supervisor in commercials with Omar el-Zohairy, while Hany Morsy went to work as a focus puller in a TV serial drama. Both workers have ‘upgraded’, in other words, and I believe that it is because they were both judged to be skilled (*shater*) at their respective jobs, while having assimilated the rudiments of behavior on set. In Tarek’s case, at least, I know that Zohairy viewed her as the most talented among his trainees. When I asked him why, he answered that it was because she knew the value of time on set, in such a way that she could man-manage rowdy extras without causing any delays (see chapter 5). Some trainees do not ‘upgrade’ so quickly, and I believe that it is in no small part because they are judged by their peers *not* to have learned the basic *savoir-faire* to do their job and, more broadly, the *habitus* associated with their position in the industry. Indeed, as I will mention in chapter 2, some trainees can acquire increasing *savoir-faire* without adopting the proper *habitus* expected in the industry’s division of labor, thereby being excluded from working opportunities directly because of their general attitudes and dispositions, not their specific skills.

⁴³ To give a different example, there are no knowledge pre-requisites to start working as a legwork production crew member: one need only to be introduced as a runner, acting as a *de facto* trainee on set. While a runner is expected to engage in various menial tasks, he is also expected to observe how the shooting works, what the hierarchy of command on set is, what each worker is supposed to do, and so on. This informal training constitutes the bulk of experience accumulated by lower-end production crew members, but they can be validated by ‘experiments’ run by higher-end crew members. For instance, in *The Cat and the Mouse* (2015), Ahmad Abd el Aal (runner) told me how Tamer Fathi (production manager) would ask him random questions concerning a prop or a location in the scenario, fully knowing that Abd el Aal would not be personally responsible for this prop or this location, but wanting to test whether or not his trainee had properly read the scenario (as required by all production crew members in this team).

The personalized and embodied apprenticeship undergone by novices in the industry is not just a ‘socialization’ process, in the sense of an incorporation of a set of sociological norms, but it is very much a ‘sociotechnicalization’ process, where incorporation of social expectations is coterminous with the incorporation of technical skill. In the last shooting days of *Décor*, Morsi (gaffer) intentionally hit a spotlight leg carried by one of his second assistants. The assistant seemed both surprised and angry, as he was going down the stairs with such heavy equipment, yet Morsi did not budge and uttered a brief ‘watch out!’ (*5alli balak!*). I looked at him with puzzlement, thinking that it was a very dangerous move for the assistant, the equipment, or anyone who might have been hit nearby, but Morsi shrugged it off and said that he wants to build his assistant’s awareness. Morsi said that he thought his assistant was a little dazed, and he wanted to ‘wake him up’, as it were – not to be cheeky, but to teach him that he should always be alert and aware of his surroundings. In this case, what may be taken as a social norm – i.e. ‘be careful not to hit anyone’ – is instilled through a physical action – i.e. hitting the equipment – thereby (hopefully) leading to the incorporation of a technical skill – i.e. how to carry spotlight legs around the set.

This kind of technical enskilling is obvious with specialized cinema equipment, which is chiefly manipulated at work, yet it is more subtle in the case of personal technological devices, which at work seem like ordinary implements to the filmmaker’s activity. In fact, I have rarely heard anyone talking about the acquisition of computer or smartphone skills in the same sense as ‘learning a craft’ (*yet3allem san3a*); as a gaffer learns to carry spotlights; as a grip learns to lay down tracks; or as an assistant director learns to direct extras. While this kind of technological learning is not instituted in the industry’s labor hierarchies, the way in which filmmakers learn to use technological devices seems like a very personalized and embodied experience. Everyday

experimentation with these objects in addition to some formal training with computers and ‘how did you do that?’-s addressed to tech-savvy crew members can be seen to accumulate into a gradual learning with personal technological devices. While I have witnessed specific moments in each crew member’s technical enskilling, then, I remain keenly aware that their skill is not contained within these one-off instances: they are, rather, inserted in a lifelong process of apprenticeship. To take this view seriously would be to rigorously demonstrate how learning to use technological devices is equally, in effect, learning to think through them. This demonstration will have to wait, since I lack the empirical evidence to make this connection.

While certain roles necessitate formal training, then, there is a sense in which even formally trained novices need to be ‘retrained’ once they start working in the industry. It is very common to hear High Cinema Institute graduates saying, ‘I have learned nothing until I started working in the industry’. This is certainly an exaggeration, just as it would be an exaggeration to say that I ‘knew nothing’ about Egyptian cinema before I did my fieldwork, yet it is a revealing statement on the dominant mode of apprenticeship in the Egyptian film industry. This apprenticeship is not about acquiring theoretical knowledge (even though it can be the case with formally trained workers): it is chiefly about incorporating a *habitus* attending to one’s position in the industry and *savoir-faire* attending to one’s job. This entails proximate, personalized interactions with a great risk of error and, by extension, an emphasis on learning by trial. This is exaggeratedly illustrated by the mighty tales of on-set trainees who, having made a mistake, manage to miraculously repair it, thereby appearing in the good graces of their superiors and incorporating a moral lesson about the way in which they ought to execute their jobs.

VI. Emic Models of the Industry

Thus far, I have tried to give a sense of the Egyptian film industry's general shape, as well as its central organization around interpersonal relations and its reproduction through master-to-apprentice transmission. The extent to which this interpersonal organization permeates the industry is not always recognized by Egyptian filmmakers. In emic understandings, the 'gang-like' nature of interpersonal networks (*shelaleyya*) is highlighted as much as divisions between 'commercial' and 'independent' cinema⁴⁴. I would argue, contra this emic model, that the use of the labels 'independent' (*mustaqill*) vs. 'commercial' (*togari*) or 'in the market' (*fil-sou2*) are instances of boundary-work, whereby a professional community traces its outer limits by exclusionary means (Ganti, 2012: 7). A 'commercial' line producer like Ahmed Farghalli, to give one example, views Ahmad Abdalla as an 'independent' director, even though Abdalla has already collaborated with a medium-sized 'commercial' company (i.e. Film Clinic), which colors Abdalla's presumed independence in the eyes of self-defined 'independent' filmmakers (with the added knowledge that Abdalla identifies with neither camp).

Boundary-work, here, is either about proudly asserting one's adhesion to the commercial side ('I make *real* movies! I'm not like *those* independents...') or to the independent side ('The mainstream market can't do anything right! We need an alternative!'). Distinction from *el-sou2*, the market, is a hallmark of independent cinema. As Ortner remarks in the American indie industry, 'independent filmmaking sees itself as

⁴⁴ The late 1990s saw the rise of 'independent' cinema (*el-sinema el-mustaqilla*). The idea was initially pushed by a group of filmmakers seeking to create an 'alternative' to what was perceived as 'commercial' cinema (*el-sinema el-togareyya*). The independent scene encompasses people who make short films and documentaries, but in the feature-length category, it is represented by directors like Tamer el-Said (head of Zero Productions), Hala Lotfy (head of the production cooperative 7assala), Ibrahim el-Batout (who currently works with actor Amr Waked's company, Zad Productions), and Ahmad Abdalla (the director of *Décor*, who has until his collaboration with New Century worked with Mohammed Hefzy's company, Film Clinic). The independent scene is stereotypically associated with downtown Cairo, where according to a popular sentiment in the 'commercial' industry, just about anyone can pretend to be a filmmaker.

different from, and better than, Hollywood in its ethos and practices of making films' (2013: 30). 'The market' stands for the whole so-called 'commercial' enterprise: the permeable job market between TV serial drama production, advertising, and filmmaking, even though the former two are decried as crasser commercial endeavors. Independence is articulated by opposition to some kind of commercial mainstream, although the nature of the opposition is unclear in Egypt – is it opposition to mainstream production patterns? mainstream sources of funding? mainstream stories and plot lines? I wish to clarify two points in attempting to answer these questions. First, I would argue that the labels 'commercial' and 'independent' have no bearing on the essentially commercial nature of any filmmaking enterprise in today's film industry. While independents may boast the superior artistic quality of their films, as opposed to trashy money-making movies, one cannot doubt the commercial motives inherent in independent filmmaking. Although their sources of funding and their target audiences may differ (i.e. national, regional, and international festivals vs. local exhibition and satellite channels), both so-called 'independent' and 'commercial' cinema are, in part, commercial enterprises.

Second, in political economic terms, I would maintain that the 'commercial' and 'independent' sides of the industry both work through interpersonal relations. If independents tend to work more with independents, it is because they have better connections with each other, while access to 'the market' and its distribution outlets is difficult to them precisely by lack of these connections. One might argue over what sustains these relations in the long run, whether it is a common commitment to certain aesthetic notions or a common access to certain international circuits of funding and distribution, but it is nevertheless indubitable that the distinction between 'independent' and 'commercial' circles is, at its core, a distinction between individuals and the social relations that they entertain. This is well illustrated by Ahmad Abdalla's example, since he

could fall in either camp depending on the set of social relations invoked by the person engaged in boundary-work. In Farghalli's view, Abdalla is an independent; in the view of an independent like Hala Lotfy, he is no longer so.

One may still be struck by the extent to which this chapter was centered on individual relations. This is because my analysis of imponderable problems – indeed, the very idea of imponderability – relies on the individual's inability to grasp all courses of action leading onto a specific outcome in the making of a film. As a general reminder, my analysis is situated within the broad historical context outlined in sections II and III, in addition to the lifelong interactions and apprenticeship sketched in sections IV and V respectively. The conditions under which Egyptian filmmakers mediate imponderable problems are precisely possible *because* the industry's organization is interpersonal. Engaging with this micro-level of analysis is therefore crucial to further an anthropological perspective on imponderability in today's Egyptian film industry.

The organizational chart is divided into seven sections, each with a red dashed border and a number in a circle at the top left. The sections are:

- 1 - Production:** Includes Producer, General Manager, Line Producer, Postproduction Supervisor, Accountant, Car Services, Location Services, and Buffet.
- 2 - Actors & Extras:** Includes Stars, Secondary Roles, Regisseur, Talking Extras, and Silent Extras.
- 3 - Direction:** Includes Screenwriter, Director, First Assistant-Director, Second Assistant-Director/Training, Clapper, Video-Assist, Assistant-Assist/Training, Editor, Assistant-Editor, Composer, and Key Grip.
- 4 - Cinematography:** Includes Director of Photography, Graphics Supervisor, Graphics Assistants, Cameraman, Focus Puller, Script (light), Chief Camera Technician, First Assistant-Camera, Second Assistant-Camera, and Training.
- 5 - Decor:** Includes Stylist, Assistant-Stylist/Training, Chief Costumer, Costume Assistants, Hair Stylist, Makeup Artist, Makeup Assistants, and Hair Assistants.
- 6 - Styling:** Includes Sound Engineer, Sound Editor, Assistant-Editor, Boom Operator, Sound Assistants, Sound Mixer, and Assistant-Mixer(s).
- 7 - Sound:** Includes Art Director, Prop Master, First Assistant-Decorator, Second Assistant-Decorator/Training, Prop Assistants, Chief Builder, Lead Carpenter, Lead Painter, Lead Varnisher, Electrician, Glass worker, Metal worker, Plumber, Upholsterer, Carpenters, Painters, Varnishers, and Training.

A legend on the right side of the chart lists the sections: 1 - Production, 2 - Actors & Extras, 3 - Direction, 4 - Cinematography, 5 - Decor, 6 - Styling, 7 - Sound.

Chapter 2

Labor Hierarchies

I. 'Labor' and 'Hierarchy'

Prior to setting foot in Cairo, I had never seriously thought about the kinds of working relations that I would witness in the Egyptian film industry. I was wholly driven by exploring the various uses to which technological devices were put, and I (wrongly) assumed that labor was more or less marginal to these uses. Quickly, I realized not only that my field notes were filled with references to labor (e.g. work tasks, contracts, salaries, career paths), but that these references were vital in understanding why certain devices were used by certain crew members and not others, and why certain patterns of technological use were regularly repeated throughout the filmmaking process. Moreover, labor hierarchies are vital in understanding how people behave in the Egyptian film industry: they constitute core assumptions about *who* is responsible for dealing with specific imponderable problems. The division between 'artistic' and 'executive' labor is crucial to this mediation, insofar as both types of workers get assigned, *de facto*, specific responsibilities towards specific imponderable outcomes. Understanding the industry's hierarchical division of tasks is therefore necessary to understanding why imponderable problems are not entirely unpredictable to individual filmmakers.

Before I delve into the description, the two key terms in this chapter – 'labor' and 'hierarchy' – need some conceptual clarification. By 'labor', I mean the social relations engaging cast and crew members who *work* on a given film project. The distinction between work (*el-sho8l*) and outside work (*barra el-sho8l*) is a very common one in the

industry: work is about executing specific tasks in film production; outside work is about being free from working obligations. I use the work/non-work boundary as a heuristic to isolate, somewhat artificially, a set of social relations specifically organized around what is ordinarily understood as ‘work’ in the Egyptian film industry. In an industry where workers move across various working spaces at various moments in an extended production process, and where ‘work’ can be delivered even in ‘non-work’ spaces and times, the simplest way to think about the working day is to acknowledge the moments at which the worker’s attention is concentrated on – or away from – working duties, without reproducing unnecessary distinctions between, say, ‘home’ and ‘work’ (see Nippert-Eng, 2010).

By ‘hierarchy’, I mean the enduring, conscious, and vertical division of labor in the Egyptian film industry. Whenever I asked someone about a given team’s hierarchy, I was surprised to find clear and consistent answers. When I asked a recent graduate from the High Cinema Institute what a continuity script supervisor does, she immediately replied, ‘Do you know how the direction team is divided?’ I genuinely did not know at the time, so she proceeded to explain the team’s hierarchy, starting with the director, then the AD, then the continuity script supervisors, then the second and third assistants, each with allotted tasks and rankings. This description was not just accurate in my experience: it was shared by everyone that I interviewed on the matter. This regularity is especially striking because, as I have mentioned in chapter 1, commercial film production is not vertically integrated in Egypt – i.e. it is not centralized in a single production company with a hierarchical structure. Rather, cast and crew members are hired based on interpersonal relations. In this context, one might have expected working relations to look something like an ‘actor-network’, where each crew member occupies an equivalent node in a web of interpersonal links. The emphasis on hierarchy, however, is still widely prevalent.

The kinds of hierarchical relations that I will be describing are widespread in the Egyptian labor market, especially among workers in artisanal and mechanical crafts (see Elyachar, 2005: 96-136). While I cannot expand on the historical roots of the link between cinema and craftsmanship⁴⁵, the continuity is evident on many counts: a master-to-apprentice model of technical enskilling; a systematic attribution of superior technical skill to the master; the master's exclusive right to 'stand at the machine' (*yo2af 3al makana*); and a horizontal model of career advancement, whereby promotion to the top rank requires a move to a workshop beyond the master's purvey. Although in line with wider labor practices in Egypt, the hierarchical relations in the film industry are specific to its socio-historical context, as outlined in chapter 1⁴⁶.

These hierarchies have no timeless or bounded quality. They are persistent enough to survive significant changes in the industry's history, while being consciously recognized, discussed, and sometimes resisted⁴⁷. This is well illustrated with working

⁴⁵ I lack sufficient evidence to demonstrate the connection, but it is apparent that the patterns of work in various mechanical crafts of European origin in Egypt, including cinema and car mechanics, are historically linked. This connection is most visible in the oral histories of skill transmission between *khawagat* (i.e. Egyptians of foreign origin, mostly European) and Egyptian craftsmen. Elyachar reports, for instance, that one of the great master craftsmen in the Hirafiyyeen neighborhood in Cairo learned his skill at repairing automatic car transmission from the *khawaga* Antoin, and that this mode of transmission was frequent in the Heliopolis neighborhood (2005: 111-115). Similarly, Abdelsalam Radwan (clapper) told me that the generation of cinema workers that had learned from *khawagat* was the most skilled, because the *khawagat* had the original knowledge of the cinema craft, which is now somewhat corrupted by its transmission via Egyptian workers. In addition to indicating common attitudes towards the superiority of 'European' technical knowledge, Abdelsalam's folk history of the industry, narrated in terms of generational transmission from an original core of European craftsmanship, rejoins the existing historical narrative concerning this pattern of transmission, most notably the education of Studio Misr technicians in Germany and France in the 1930s (El-Hadari, 1995: 89-90). Still, in the absence of additional evidence, I would be hard-pressed to argue that this is the whole story of technical enskilling in mechanical crafts at the beginning of the 20th century, and the explicit connection between cinema and car mechanics remains to be demonstrated.

⁴⁶ I should mention that the closest industry to the Egyptian one in terms of labor hierarchies is the French film industry. Not only are tasks divided in a similar way across teams and sub-teams, but a very similar link between hierarchy and career promotion exists in both industries, in addition to a very similar distinction between 'artistic' and 'executive' labor (see Rot & de Verdalle, 2013).

⁴⁷ For instance, the recent passage to digital cinema has occasioned some expected changes in the organization of labor. The 'loader' role, which was about switching rolls of film negative in 35mm cameras, has now entirely disappeared. Despite the loader's disappearance, the camera team is still more or less intact when, arguably, digital camera technologies have made some remaining roles 'functionally' obsolete. One wonders, indeed, why three to four camera technicians still accompany digital cameras on set (as they did with analog cameras), when only one technician would be able to do a similar job. Why has the loader disappeared, but not the rest of the camera crew? The most probable answer, as I was told by

disputes: in an incident between Jaylan Auf (movement script) and Omar el-Zohairy (AD) in *Décor*, Zohairy had to explain to Auf why she had done wrong by drawing a little diagram of the direction team's hierarchy, and explaining how all executive decisions need to go through him. The hierarchy, in this case, was blatantly reinforced by Zohairy's mini-lecture. In other cases, it can become an object of disagreement. This is especially salient in low-budget movies like *Poisonous Roses*, where limited finances can constrain the crew into rearranging the accepted division of tasks by breaking down established hierarchies. I would insist, then, that the labor hierarchies in today's industry do not amount to a picture frozen in time, but to a consciously manipulated yet widely accepted and embodied model for the organization of work.

These labor hierarchies are better illustrated with the diagram in figure 2. When read horizontally, it expresses the overall division of labor on a given film project, across seven teams or departments: production; actors; direction; cinematography; art direction; styling; and sound. When read vertically, it expresses the hierarchical relations within each team and, to some extent, the general representation of each role's status vis-à-vis the others. In sections II to V, I will describe labor hierarchies in the order prescribed by the horizontal reading, with a concluding thought on the distinction between 'artistic' and 'executive' labor in the Egyptian film industry. In section VI, I use these labels to translate the emic terms '*fanni*' and '*tanfizi*', which indicate a central distinction between decisions about the film's aesthetic appearance vs. the labor invested in making it. While this chapter presents a static view of filmmaking tasks, chapter 3 will compensate by presenting a detailed diachronic operational sequence (*chaîne opératoire*) of film production. Chapters

cinematographer Marwan Saber, is that the camera crew acts as an insurance policy on expensive film equipment. While equipment in Euro-American industries can be insured by private companies, such insurance is impossible to secure in Egypt according to Saber. Thus, one is forced to employ actual people in order to supervise the camera equipment – actual people whose roles, while changing in nature with digital cameras, have still not lost their place in the industry's division of labor.

5 to 7, on their part, will give a better sense of the enactment of this division of labor in everyday practice. Three additional specifications need to be made on the diagram:

(1) Some crew members are inserted in a box: this means that they are not formally part of any team (e.g. production, direction, art direction). Their general position on the vertical axis, however, indicates how they are considered in the industry's status ranking. The contrast between stars and extras is instructive in this regard. While there is no sense in which the star and the extra are part of a single team, or that the star has any direct authority over the extras, there is a clear sense in which stars are deemed to be superior – e.g. in terms of salary, professional respect, artistic work. Crew members in postproduction are inserted in boxes marked by a star. The postproduction crew is not a 'team' in any sense, and it is not valued 'status-wise' in exactly the same way as workers involved in preparations or shooting, but they are better considered than the bulk of manual workers (*3ommal*) in the industry (e.g. gaffers, grips, prop assistants, craftsmen). This status distinction most often maps onto a class distinction in Cairo. Indeed, while manual and 'legwork' production workers tend to come from working-class or 'popular' (*sha3bi*) backgrounds, artistic and postproduction workers tend to be middle- to upper-middle-class. Their preferential treatment can be attributed to something as evanescent as 'looking clean' (*shakloh ndif*), which is not so much a remark about hygiene as a thinly veiled comment on class. As I have explained in introduction, I personally benefited from this kind of deference given my own class background, although I had no formal position within the industry.

(2) Some crew members are inserted in dotted lines: this means that their position exists and is recognized in the industry, but that it is optional on any given project. In some projects, therefore, no one is hired in this specific role and, whenever someone is hired, his/her presence is not deemed necessary on every single shooting day. In *Décor*, for

instance, there was no continuity script supervisor for accessories, since the movement script combined both roles in addition to her usual tasks. Still in *Décor*, there was a lighting script (Hany Morsy), yet he was not present on every shooting day. This is in part because, as Ahmed Farghalli explained to me, his presence was not really necessary on those days (i.e. there were no lighting continuity issues).

(3) Today's film industry is a very heavily male industry, except in certain roles considered 'feminine' (e.g. female stars, stylists) or with a significant female representation (e.g. directors, screenwriters, continuity script supervisors, art directors, editors). While I cannot delve in great detail into the gender imbalance in the industry, I still wish to make it clear that the imbalance is well and truly there, and that it colors the way in which certain roles are perceived. To this effect, I use male pronouns with the understanding that some roles are exclusively (or almost exclusively) male, while my seemingly inconsistent use of 'she' pronouns is aimed at describing roles where women are somewhat more evenly represented.

II. Production

The general manager (*moshref 3am*) is the executive head of production in a given company. In some companies, the general manager is the producer (*monteg*), who is essentially a funder – a source of capital⁴⁸. The producer has ultimate authority over any

⁴⁸ The word 'producer' (*monteg*) has slippery meanings in Egypt. I have often been told that there are 'no producers', but the reasons given for this absence vary. Some argue that there are 'no producers' like Ramsis Naguib anymore: the legendary producer from the 1970s and 1980s famously invested and gained his capital exclusively in the film industry. The 'Ramsis Naguib' model is contrasted with a 'broker' (*semsar*) model of film production, where production companies receive loans to make movies, and a 'European' model, where the producer acts as a catalyser between various individuals and institutions seeking to finance, create, or execute a film project. Whenever the word 'producer' (in English) is used, it most likely designates the 'European' model (of which Film Clinic's Mohammed Hefzy is a good Egyptian example). Whenever the word '*monteg*' is used, by contrast, it generally designates the financier, no matter

major production decisions – such as which scenarios to fund, which stars to hire, or how many movie copies to print in a theatrical run. In New Century, the producer Walid el-Kurdi was never present in Cairo, except by his daily phone calls to the general manager, Ahmad Badawy. In practice, then, Badawy executed all major decisions in the producer's name – including, centrally, choosing scenarios to fund; hiring stars and directors; choosing line producers on each project. The line producer (*monteg fanni*) is the highest member on the production team in a given project. While the line producer's decisions are ultimately subordinated to the producer's authority, he has some autonomy in choosing his own production team and in hiring all crew members.

The line producer's central task is budgeting: he budgets all spending made in the course of production, including wages, production fees, permit fees, and transportation fees⁴⁹. The line producer in *Décor*, Ahmed Farghalli, agreed with Badawy (and, by extension, Walid el-Kurdi) on a total sum of spending initially, which was extended by the producer when actual expenses exceeded the initially approved amount. Farghalli was still responsible for following the flow of daily expenses with the accountant, Mohammed Hosny. In addition to budgeting, Farghalli oversaw the daily activities of his production team in preparations and shooting (e.g. getting censorship approval on the scenario, securing film permits, scouting apartments, buying accessories, buying costumes). He also oversaw postproduction until the film was printed⁵⁰. With the help of his production manager, Mohammed Setohy, Farghalli signed contracts with all cast and crew members,

his experience in the film business, while a '*monteg monaffez*' ('executive producer', in a literal translation) is a subcontracted producer who makes films with someone else's money. The argument that there are 'no producers' seems, in this sense, to mean that there are too many people who lay claim to the status of 'producer', a situation which again reminds us of the importance of 'boundary-work' in the Egyptian film industry as in Bollywood (Ganti, 2012: 7).

⁴⁹ The budget managed by the line producer only covers preparations and shooting – the budget for postproduction is directly negotiated between the production company and the postproduction company (e.g. between Badawy and Abul-Saad, if New Century collaborates with TimeCode).

⁵⁰ The day-to-day transporting of postproduction material to the appropriate locations (e.g. editing rooms, coloring studios, or sound studios) was overseen by a postproduction supervisor, Mostafa Abu Zeid, who was a production team member. Farghalli, on his part, was the central communication link between postproduction workers and his postproduction legwork.

and he received money-related demands by the artistic crew (e.g. adding a new shooting location, getting additional lenses with the camera set, buying additional set-building materials, buying props and costumes). Farghalli made sure that everyone in the cast and crew was meeting in preparations and, later on, he made sure to implement the shooting schedule designed by the AD, Omar el-Zohairy.

Farghalli will regularly surface throughout this thesis, not only because he has been an invaluable interlocutor, but also because being the line producer in *Décor*, he played an influential role in the film's execution. While the general job description of a *monteg fanni* in Egypt does not greatly differ from the American line producer or the French *producteur exécutif*, the actual decisions centralized under his authority cover more ground. For instance, scouting is a task undertaken by a specialized 'scout' in Euro-American contexts, but it is very much the prerogative of the line producer and his production team in Egypt. Similarly, the acquisition of props is undertaken by specialized companies in larger Euro-American productions (see Vonderau, 2015), but it is partly the prerogative of the production team in Egypt when it comes to props beyond the storage room. Thus, the size of production teams in Egypt may seem 'overinflated' by Euro-American standards, but it is a necessity to the line producer, who needs to have 'legwork' labor at hand at all times. In *Décor*, Farghalli could choose to send any of his production assistants at any time to scout a new location, or to acquire a prop, or to get a permit letter signed. As I detail in chapter 5, this model of production by direct command is central in explaining how Egyptian filmmakers manage the imponderability of film logistics.

Overall, the core production crew in *Décor* was constituted by the line producer, his production manager⁵¹ (*modir entag*), as well as the *location manager*, production

⁵¹ Under the line producer, the head of 'legwork' labor is the production manager, who concretely executes what the line producer is supposed to oversee. For instance, when Farghalli needed to advise crew members on scheduled meetings, Setohy would be the one making the bulk of follow-up phone calls – except when it comes to talking to the director and the stars, who would be in direct contact with Farghalli. When

assistants (*mosa3din entag*), executors (*monaffezin entag*), and ‘runners’. These vertical ranks, whose exact designation can vary by production team, constitute a roadmap to the training and promotion of production workers in Egypt. Although some production crew members are introduced in the industry directly at a higher rank (e.g. a producer’s family member, who may skip the legwork stage), there was a sizeable number of current line producers or production managers who simply started as runners, then slowly climbed their way to the top (including Ahmad Badawy and Ahmed Farghalli in New Century). The hierarchy among ‘legwork’ production workers in *Décor* was recognized by these very workers, even though their labor was shared day-to-day, according to the tasks assigned by their superiors. Anyone from Setohy (production manager) to Georges Ramsis (executor) could be sent out to scout a location. Likewise, anyone could be sent to buy a missing prop while shooting, even though this task was normally reserved to the aptly named ‘runners’. While legwork tended to fall more heavily on lower-end crew members, their hierarchical ranks were not so much determined by the nature of assigned tasks as they were by the skill (*shatara*) deployed in executing them. As I have indicated in chapter 1, this skill is acquired via an extended, embodied apprenticeship and, as such, serves to inscribe the crew member’s body with predispositions to act in specific ways in the face of daily working problems. These predispositions are important to explain how the imponderability of film logistics is broken down into contingent elements, as I detail in chapter 5.

It is difficult to explain what ‘production skill’ consists in, especially when its result is not a physical product whose evaluation would give some indication as to the

scouting was under way in *Décor*, Farghalli would assign locations to his crew members, but Setohy would verify that everyone actually photographs the right locations, and actually brings back scouting pictures to Farghalli on time. When shooting was under way, Setohy would verify whether the artistic crew needs anything on location, and whether there are any logistical problems in need of urgent solutions (see chapter 5). The production manager, in short, is the line producer’s hand on the ground: he physically participates in all production activities needing legwork – like scouting, or getting permits, or setting meetings – while remaining hierarchically superior to the rest of the production team.

nature of the skill in question (as is the case with movies, which set some visible standards on emic evaluations of the skill of artistic crew members, see chapter 6). My conversations with production workers have highlighted some indicators which, according to them, can help to evaluate this skill. First, the worker has to be able to get contracts, products, or services as cheaply as possible. Second, he needs to have a ‘nice tongue’ (*lesan 7elw*)⁵², which basically means being able to talk smoothly to anyone, to negotiate with anyone, of any social class, in order to get out of paying extra money or to avoid tricky situations (e.g. a passing citizen starting a fight in the middle of a shooting location). Third, he needs to work flexible hours, usually way over the conventional daily shift of twelve hours. Fourth, he needs to withstand pressure on location, sometimes to the point of getting screamed at. Lastly, he needs to be able to ‘think on his feet’, especially when he commits a mistake and has to repair it.

These disparate elements constitute what we might call, following Scott (1999: 313-316), the production worker’s *mētis* – a kind of practical knowledge encompassing both the ability to outwit one’s interlocutors in intersubjective interactions *and* the ability to execute technical actions with some success. This practical knowledge can be acquired with experience (*5ebra*) in the industry, yet experience is not the determining factor in explaining the production team’s hierarchy. As Hany Abdel Latif (production assistant) once told me, someone with less experience yet more ‘skill’ might find himself in a higher

⁵² The ability to have *lesan 7elw* is a strength invoked beyond the film industry’s production workers, by any Egyptian working in what may be called, for lack of a more specific term, ‘market relations’. In her discussion of mastery among craftsmen in Cairo, Elyachar argues that part of the master’s ability to constitute a clientele is to be able to talk to all kinds of clients, of all social classes, and understand what they want and how much they are willing to pay (2005: 123). Similarly, Hisham Fathy, a former real estate agent in Cairo, says that his core strength as an agent was to be able to talk with all kinds of clients, of all social classes, and know which apartments they could afford and how he could seal the deal with them. In these apparently distinct lines of work, Egyptian workers are engaged in face-to-face negotiations where skillful interaction is evaluated according to one’s ability to deal with a potential ‘market actor’, not in the abstract sense of neoclassical economics, but in the concrete sense of someone out of whom they want something (a *masla7a*, as it called locally). The term ‘market relation’ describes a good deal of the interactions undergone by ‘legwork’ production workers in Egyptian film production. These interactions include, for instance, negotiations with local real estate brokers (*samasra*, sing. *semsar*) to watch potential scouting locations; negotiations with the property owner to get a good price and leeway to modify the space for the artistic crew; and so on.

position as opposed to someone with more experience and less ‘skill’. Over time, then, rising in the esteem of one’s superiors leads to promotion within the team. In my experience, promotion was agreed between two projects, because it entails a salary increase in addition to the professional upgrade. Rising to the highest ranks, however, involves a move to another production company or another production team. This is very similar to the horizontal advancement of Egyptian craftsmen described by Elyachar: when a skilled apprentice seeks to become a master, he has to leave his workshop and open one on his own (2005: 113).

In addition to the core production crew, where people are hired and supervised by the line producer, several crew members gravitate around the production team without being in production *per se*. These crew members are not trained to work in production, and they are not promoted within the core production team. Among these jobs, the accountant is central in issuing payments to the crew, and he is expressly hired by the company to approve and verify all spending in the course of production. Since all payments in the industry are in cash, the accountant is responsible for reviewing the distribution of the company’s money either as prepaid production costs (*3ohad*, sing. *3ohda*) or as wages, given to the rest of the cast and crew. In addition to the accountant, there are workers who provide specific services on set, including the ‘buffet’ team (i.e. two to five workers who serve all catering needs on set in exchange for individual fees), the ‘car services’ team⁵³ (i.e. drivers who transport cast/crew members, equipment, or accessories), and the ‘location services’ team (i.e. two to five people providing seats to higher-ranked crew members while being assigned to all cleaning duties). These workers are regarded as the very low end of the film industry, whether in terms of salary, status, or class standing. Yet,

⁵³ The ‘car services’ team is different from vehicle rental services, which provide cars with specific models and colors to serve as props in shooting. Such companies are sought out on a car-by-car basis, depending on the film project’s needs. Famous rental companies include the McGuivers (Amr McGuiver, Sherif McGuiver) and the Simas (Sayyed Sima).

their services are vital to the daily running of a film set. Indeed, reliable car services or location services are prized by production crew members. Setohy once told me that he never works in a film without Adil Abdel Fattah, his car services guy, because he can always depend on him whenever he needs a car on the spot. Sure enough, Abdel Fattah's cars ran all logistical missions in *Décor*. Similarly, Ahmed Farghalli likes to employ Mondy, a location services worker, because he would work hard with the greatest acceptance (*reda*) over his standing. On several occasions, Farghalli told me to write about Mondy because, as he said in front of him, he is 'the most important person on set'. This is not an objective assessment of Mondy's status, of course, but what I take to be a token of gratitude to one of the 'unknown soldiers' of the Egyptian film industry (see chapter 7).

III. Stars, Secondary Actors, and Extras

The innumerable on-screen actors in Egypt can be divided in three broad categories: stars (*nogoum*, sing. *negm*), secondary actors (*momasselin sanawiyyin*, sing. *momassel sanawy*), and extras (*magami3*). Star status has ambivalent meanings. For some like venerable director Daoud Abdel Sayyed, a star is any actor who brings audiences to the box-office. As I came to understand, stars are not simply liked by mass audiences: they are more importantly sought out by local and regional distributors, just like Bollywood stars in Ganti's description (2012: 208-212). As I have explained in chapter 1, this has great consequences for commercial film production in Egypt. Signing a star can convince distributors to buy the film's rights, thereby guaranteeing revenues to the producer and encouraging his investment. Setting aside a few indisputable (mostly male) names, several actors lay claim to the 'star' status without being commercially successful or, more

importantly, without being perceived as commercially successful by distributors. These are well-known actors, who play main characters in various movies, and who receive ‘star’ treatment on set (including having their own caravan and their own assistants, as well as interacting with the highest-ranked crew members). Thus, one may distinguish between two meanings of ‘stardom’ in Egypt: one is measured by a capacity to distribute movies (and, by extension, to attract audiences in the distributor’s estimation); the other is measured by a tendency to play main characters.

According to Farghalli, stars are hired by the producer in agreement with the director and the screenwriter. When a star is designated, a scenario is sent to him/her so s/he can decide whether or not to join the project. Whenever s/he agrees, s/he negotiates a contract with the producer⁵⁴. Stars are rarely (if ever) auditioned in any role. By contrast, secondary actors are regularly auditioned, although they may also be directly selected by the director. In *Décor*, for instance, most secondary actors were handpicked by Ahmad Abdalla, while some were cast among the crew members themselves. While I have cast some actors in *Poisonous Roses*, I have never witnessed an external casting session. That said I know that they can consist in an assistant director asking the actor to read out a scene, in front of a camera, then taking the material to the director to choose an ‘appropriate’ actor⁵⁵. A second method consists in choosing from a pre-selection made by a *regiseir*, who is a kind of ‘casting director’ specializing specifically in casting extras. In

⁵⁴ Contract negotiations with stars can lead to disagreements with production companies, since stars command substantial salaries as I have described in chapter 1. These salaries vary according to the production company, but the degree to which they are perceived by the producer/general manager as being ‘deserved’ will depend on the star’s commercial success. When a star is perceived as being commercially successful, s/he will have an easier time demanding a higher amount vs. a non-commercial star. While preparing Daoud Abdel Sayyed’s *Out of the Ordinary* (2015), a star asked for 2M LE in order to make the movie, but New Century refused to pay and eventually booted the star off the project, because they did not value his star-like status enough to pay the full amount, even though it was the director’s initial choice.

⁵⁵ The Arabic adjective used to describe ‘appropriate’ actors is *monaseb*, which is a fairly generic term used in the sense of an actor ‘fitting’ his role (*monaseb lel-dor*). Many criteria intervene in defining an ‘appropriate’ actor, including his reputation (*som3a*) and the degree to which s/he is ‘convincing’ (*moqne3*) in the role, in addition to the various aesthetic ideas held by directors about actors, which I will not extensively discuss in this thesis.

Décor's preparations, I would regularly see Omar el-Zohairy (assistant director) scrolling rapidly through a long list of pictures and video files on his MacBook, with each extra appearing in 30-second videos shot by Hazem el-Aswany's office, detailing name, age, height, weight, and previous acting experience. When he found an appropriate actor, Zohairy proposed him/her to the director, awaiting his final decision before contacting the production team and contracting the actor in question. These casting methods illustrate the importance of what I call 'visual mediators' in chapter 6: videos or images that are not part of the final film yet are central in making contingent decisions throughout the filmmaking process – in this case, casting choices.

The distinction between secondary actors and talking extras is not necessarily evident on screen, but it is evident in the industry's status ranking⁵⁶. This is most visible on set. On the first shooting day in *3antar w-Bisa* (dir. Mohammed Tahawy, 2014), stars would get their own caravans/hotel rooms to relax in between shots; secondary actors were made to share a room; and extras just stood by the side of the external shooting location. While stars and secondary actors receive direct instructions from the director (i.e. an 'artistic' crew member), extras are directed by the AD and his assistants (i.e. 'executive' crew members). In short, extras are at the bottom of the industry's status hierarchy, on par with lower-end production legwork, lighting assistants, and prop assistants. Talking extras, however, are better paid and better considered than silent extras⁵⁷. Since extras can come

⁵⁶ For one thing, secondary actors are contracted by the production crew, and their salary is negotiated based on the length of their role in the scenario. Extras, by contrast, are paid daily by the *regiseir*, who receives a lump sum from the production company for the total number of extras that he brought, and later takes his own share off of the extras' daily payment. Beyond money matters, the label itself is significant: calling someone an 'actor' (*momassel*) means that s/he can 'act', i.e. that s/he can engage in a central 'artistic' role in the film, and by extension, that s/he is worthy of respect. Calling someone an 'extra' (*magami3*) means that s/he cannot act, i.e. that s/he is just here to fill space on screen, and by extension, that s/he can be treated with less respect and, sometimes, with moral opprobrium. Indeed, I have heard legwork production crew members defame female extras because they dress in socially inappropriate ways or, purportedly, try to attract the (male) director's attention, although very similar behavior can be tolerated for female stars and secondary actresses.

⁵⁷ In my experience, silent extras are cast on looks alone (i.e. a headshot or a video). Moreover, they can be cast solely by the first assistant director, since they are meant to serve as on-screen fillers. Silent

in great numbers, the *regiseir* is expected to ‘control’ them, not just in the sense of securing their data (height, weight, headshot), but also in the physical sense of herding these crowds on set. To this end, and depending on the size of the crowd, the *regiseir* can have several colleagues who bring their own extras based on their own data, and who engage in the task of controlling them⁵⁸.

Contrary to all teams on set, actors have no hierarchy of promotion. There is no pre-determined path for a silent extra to become a star, and there is no sense in which one needs to be a secondary actor before becoming a star. Each category is chosen by different means, without mentioning how actors are subject to the availability of roles in given scenarios, each with their own prerogatives (e.g. male vs. female roles, specific age-ranges or specific look requirements). There is a general sense in which an actor’s reputation (*som3a*) impacts his professional ranking. Being a ‘star’, after all, is a matter of reputation among producers and distributors, and working regularly as a secondary actor or an extra requires attention to one’s reputation among directors, assistant directors, and *regiseirs*. Although I have spent little time with actors, I can say that their reputation among production and direction crew members is built on two bases. It is built, first, on their ability to execute well (in the director’s or the producer’s estimation) a role in which they have been cast; and second, on their on-set behavior (e.g. politeness, punctuality). Actors who are judged to be skilled in a given role are likely to be cast in a similar role in later

extras come in various grades, each with a lower price: A-class extras (who look like ‘classy’ Egyptian types); B-class extras (who are ‘less classy’ Egyptian types); C-class or popular extras (*magami3 sha3bi*, who are used in scenes with popular neighbourhoods or popular ‘parties’, known as *afra7*). Extras used to play Euro-American characters, also known as ‘foreign extras’ (*magami3 aganeb*), have their own hierarchy of status.

⁵⁸ Beyond on-set control, the actor’s affairs manager (*sho2oun momasselin*) hired by the *regiseir* maintains phone contact with all secondary actors and extras in preparations and in shooting, alerting them to their working schedules, their locations, the costumes they need to bring, and so on. In *Décor*, stars were always in direct contact with the line producer or the production manager, putting their own assistants in contact with the production team to coordinate schedules. I suspect that this division of labor between the production team, the actors’ affairs manager, and the *regiseir* in the management of actor schedules is specific to the Egyptian film industry. While these roles differ from the agents and PR managers acting as professional intermediaries between actors and production teams in Euro-American industries, they still constitute an identifiable addition to the entirely intermediary-less work described by Ganti in Bollywood (2012: 193).

film projects, which is why type-casting is a very common phenomenon in the Egyptian film industry. If the actor's behavior is rowdy or disrespectful, s/he might disqualify him/herself from future working opportunities. I could witness this in casting brainstorm sessions among production or direction crew members in *Poisonous Roses* and *The Cat and the Mouse* (dir. Tamer Mohsen, 2015), where certain names were immediately excluded by attending crew members even if they were adequate to the role. This is a clear example of the distinction between having acting *savoir-faire* and having the adequate *habitus* on set: an actor with great know-how might not be a desirable worker given his ill-adapted dispositions to interact with workers in the industry.

IV. Direction

The director (*mo5reg*) is single-handedly responsible for all artistic decisions in the film – beginning in adjustments to the scenario⁵⁹ and ending with the final cut. In *Décor*, the general manager Badawy rarely intervened in these decisions, except as they concerned logistical imperatives (e.g. budget constraints) or distribution imperatives (e.g. hiring Horeya Farghaly as the film's star). Otherwise, any decision deemed to be artistic was ultimately under the director Ahmad Abdalla's purview. This includes, to give a brief list, which actors were cast and, once cast, how to guide their on-screen position, movement,

⁵⁹ The screenwriter (*mo2allef*) has a ghostly presence over Egyptian film production. After writing a scenario which has been accepted by a production company, the screenwriter's main working interactions are with the director – except, of course, in cases where the screenwriter is the director. Unlike in Bollywood, where screenwriters are little valued because they simply inscribe ideas discussed in preproduction 'sittings' and 'narrations' (Ganti, 2012: 222-223), and unlike in Hollywood, where screenwriters are submitted to several checks by studios until they receive a 'green light' to shoot (Wasko, 2003: 15-36), Egyptian screenwriters enjoy a relatively high status insofar as they are treated as the film's authors, worthy of a similar respect to a novelist or a musical composer. The screenwriter exerts no influence on preparations, shooting, or postproduction beyond writing the scenario. As I explain in chapter 3, the scenario everywhere guides the film's execution, yet the screenwriter is everywhere absent in the production process – hence, her ghostly presence.

and performance (*ada2*); what camera angle, movement, and lens size was appropriate in each shot; what shooting locations were selected and what their design looked like; what the actors' costume, hairstyle, and make-up looked like; which shots to edit in/out of the film in postproduction; what the film's color mood was; and how the musical soundtrack would sound. The artistic decisions overseen by the director are equally overseen by other cast/crew members, each holding the highest positions in their respective teams and, more broadly, in the industry's status hierarchy. Thus, screenwriting decisions in *Décor* were negotiated between Abdalla and the screenwriters, Mohammed and Shireen Diab; acting decisions were negotiated with the stars or (occasionally) the secondary actors; camera decisions were negotiated with the cinematographer Tarek Hefny; set design decisions were negotiated with the art directors Asem Ali and Nihal Farouk; styling decisions were negotiated with the stylist Salma Sami; and so on. No matter the negotiation, however, all artistic decisions were ultimately seen to be under the director's authority, and all disagreements were settled by his word (for a concrete example, see section III in chapter 6). Much like the line producer concentrates all authority over 'executive' matters, then, the director concentrates all authority in 'artistic' matters. His word settles all ambiguity in the vast creative possibilities one might imagine to exist in any filmmaking process. This centralization of artistic authority is crucial in mediating the imponderability of the film's final look.

On set, Ahmad Abdalla's interactions were generally limited to the actors, his artistic crew, and his direction team, led by the first assistant director Omar el-Zohairy. As Zohairy put it, the AD lays out 'the course of execution of a film' (*el-masar el-tanfizi lel-film*). Without being liable to take any artistic decisions, and without engaging in production legwork, the AD is required to make a complete scenario breakdown and a

shooting schedule⁶⁰. He is directly hired by the director, but he gets to hire his own scripts and second assistants. Continuity script supervisors in Egypt act like the AD's assistants, contrary to Euro-American industries, where they are strictly responsible for ensuring continuity⁶¹. In the preparations of *Décor*, for instance, the scripts assisted Zohairy with various breakdowns, casting sessions, or meetings with artistic crew members. In shooting, they followed continuity in their respective assignments (e.g. dialogue, on-screen movement, costumes), as well as assisting Zohairy in giving directions to secondary actors and extras. Second assistants are employed to direct extras, but in my experience in *Décor*, Renad Tarek was also expected to help scripts with daily direction tasks. Like the production runner, then, she was expected to absorb the rudiments of the job gradually, on her own, until Zohairy deemed her worthy to upgrade within the team's hierarchy. She would have to start by becoming a continuity script supervisor, then an AD, then a director. While numerous exceptions exist to this promotion model, it is the widely accepted pattern through which anyone who wishes to work as a director is 'supposed' to pass in Egypt. Needless to say, this career makes little sense in a Euro-American context, where continuity script supervisors, ADs, and directors are deemed to practice separate professions with separate career paths (see Rot, 2014).

In *Décor*, Zohairy was the direction team's official liaison with the production team. He communicated all artistic demands to the production team – when a new location

⁶⁰ The breakdown, briefly, consists in a list of all logistical elements needed in shooting. This normally includes all locations, characters, costumes, or accessories in the film, in addition to a 'sequential' breakdown of all these elements by scene. This sequential, as Zohairy explains, is most useful in scheduling the shooting, since one needs to keep the scenario's logistical components in mind: whether a scene is held by night or by day; whether the location is available; whether an actor needs a particular hairstyle or makeup change; without mentioning the star's schedule, the shooting permit times, etc. While the script breakdown and the schedule are the AD's own responsibilities, I know that Zohairy regularly reviewed his breakdown with his assistants and his schedules with Farghalli and Setohy.

⁶¹ Continuity is a principle of filmmaking whereby space-times that are recorded in a disjointed way in shooting are reassembled in a more or less continuous sequence in editing. The continuity script supervisor ensures that, when all recorded material is viewed in postproduction, no continuity lapses will occur (e.g. no objects will seem to appear or disappear in between two consecutive takes, no actors will change clothes in the same scene, and so on). The principle of continuity is widely accepted in the Egyptian film industry, although low-end mainstream movies (e.g. Sobky films) can sometimes tamper with its iron rule.

needed to be scouted, or when a new character needed to be cast, or when a new prop needed to be bought. The production team, in turn, executed the demands communicated by Zohairy. While this communication was primarily oral in my experience, it was epitomized by the ‘*order*’ sheet, produced daily by the AD in conjunction with his assistants in order to list all logistical demands to be secured by the production team on a given shooting day. The AD, in short, is the central link in the division of labor between ‘artistic’ and ‘executive’ workers. In conjunction with the production team, the AD, his assistants, and their various breakdowns tables (*gadawel*, sing. *gadwal*) are vital mediators of the imponderable logistics of a shooting day, as I explain in chapter 5. Under conditions where the director’s word is ultimately what should be executed in the film, the AD plays a central role in ensuring that this word is carefully carried through by the production team.

In addition to intensive collaboration in preparations and in shooting, the director is heavily solicited in postproduction. Unlike in Hollywood, where the executive producer traditionally has the last word over the final cut, the Egyptian director’s word settles the final cut – even though, according to the well-known editor Moataz el-Kateb, there are cases where the producer (e.g. the Sobky brothers) and/or the star (e.g. Mohammed Saad) try to put their own imprint on the cut. The director’s most significant interactions in postproduction are with the editor and the musical composer⁶². According to Mona Rabie, a foremost editor in today’s industry, the editing job is wrongly conceived by producers as a mere cutting and arranging of film material according to the director’s wishes, which can be done by any assistant editor in her view. The assistant editor is generally perceived as a ‘technical’ worker, while the editor is the genuinely ‘artistic’ one. Indeed, in Rabie’s view, the good editor is supposed to have her own insights into the movie and discuss with the

⁶² As I was told by the musical composer and actor Hani Adel, the composer tries to craft the film’s soundtrack according to the director’s minimal directives, while trying to infuse his own feeling and insight into the soundtrack. Sound postproduction involves various operations in addition to musical composition (see section V in chapter 3), yet the soundtrack remains perceived as *the* source of sonic artistry, in contrast with more ‘technical’ concerns like sound editing or sound mixing.

director how best to execute them. These insights – including which takes to select, which scenes to include in the final cut, which rhythm to adopt in cuts – are under the director’s purview, but the editor should spend a lot of time arguing in the editing room to improve the overall movie according to her. I will discuss the intricacies of postproduction in section V of chapter 3, but it is worth noting that the editor and the composer, much like the screenwriter, are relatively solitary workers by contrast with the rest of the film’s crew. They work with their equipment in order to craft the final film, with the director’s occasional intervention.

Under the core direction team, the clapper (*clak* or *claket*) writes up shooting reports. The video-assist operator, or simply ‘*el-assist*’, plugs cables and monitors in order to give a live image of ongoing shots to the director and the cinematographer on set. Unlike in Euro-American industries, where both workers would be in the cinematography team, the Egyptian *claket* is chosen by the AD, while the Egyptian *assist* is inserted in no clear team⁶³. Moreover, their promotion within the industry follows no clear path. While continuity script supervisors and second assistants can be promoted to the rank of AD – and, later, director – the clapper and the video-assist are not inserted in the same logic. The clapper and the operator in *Décor*, Abdelsalam and Adil, would regularly complain that their profession was accorded little respect in the industry, whether in terms of salary or in terms of status. This situation is compounded by the fact that all clappers and operators with whom I came into contact have a ‘popular’ (*sha3bi*) class background. Yet, both professions are central to today’s digitized industry. While the clapper is a vital resource in

⁶³ This situation can be attributed to the peculiar history of the video-assist in Egypt. According to Farghalli, video-assist technology was introduced in film production via the advertising sector in the early 2000s. At the time, some equipment rental offices started specializing in renting video-assist equipment to the sets of the advertising sector. I would surmise that this is why the video-assist came to constitute an autonomous ‘sub-team’: each rental office (e.g. Hisham Khalil’s office, Haytham el-Sayyed’s office, Alphonse’s office) sends its own men to operate its own equipment, partly as a matter of ensuring that the operator has the appropriate skills to make the equipment work, and partly as an insurance policy over expensive equipment.

indexing disconnected takes prior to postproduction, the operator's work sustains a key visual mediator that allows the artistic crew to mediate the imponderability of the final film image while they are still on set.

V. Cinematography, Art Direction, Styling, and Sound

In addition to the screenwriter, the director, the editor, and the composer, any contemporary Egyptian film project involves four main artistic teams: cinematography, art direction, styling, and sound. Interactions between the director and each team's artistic head are vital in understanding how the imponderability of the final film's appearance is mediated, which is why I detail each team's organization in turn. As will become apparent, moreover, each team comprises many more workers than the core artistic crew, and their subordination to artistic decision-making has important consequences over the 'reification' of film labor as I explore in chapter 7.

A) *Cinematography*: The cinematography team is headed by the cinematographer (*modir el-taswir*)⁶⁴. The cinematographer is the reference in many matters concerning the film's image: lighting, camera equipment, camera settings (e.g. exposure; frame-rate), camera lenses, and lens filters. While it is common to say that 'the image belongs to the cinematographer', two decisive image-related decisions are in the director's hands in Egypt: lens size, which determines the size of the frame on screen, and camera movement. This division of tasks is in no sense universal. In Euro-American industries, these

⁶⁴ The Arabic term '*modir el-taswir*' is linguistically closer to the English 'director of photography', and it is used to designate the same role with largely the same responsibilities. That said, the English terms 'director of photography' and 'cinematographer' are used interchangeably by Egyptian filmmakers to translate the name of their profession, and I prefer to use the term 'cinematographer' to avoid confusing the reader between the words 'director' and 'director of photography'.

decisions are negotiated between the director and the cinematographer; in Pandian's description of cinematography in a Tamil project, the cinematographer retains more autonomy over lens choice than camera movement (2013); in Bangladeshi cut-pieces, by contrast, the cameraman has great autonomy over framing and movement (Hoek, 2014). The Egyptian cinematographer, in short, is supposed to transform the director's vision (*ro2ia*) into actual, composed images. The extent to which a director has specific visuals to communicate to his cinematographer varies by project and by individual, but the idea is that the cinematographer contributes to all decisions about the film's visual form, beginning with the earliest preparations – e.g. in scouting locations, or choosing camera equipment, or choosing lenses – to the latest stages of postproduction – e.g. in coloring and video-effects⁶⁵.

While he had no professional influence on set except in matters concerning lighting and camera equipment, the cinematographer in *Décor*, Tarek Hefny, would make regular suggestions to the art directors or the stylist in order to coordinate color moods or textures in the film's image. In addition to his artistic duties, Hefny managed a very large team on set – around 20 to 30 crew members. This team was divided into four sub-teams: the core cinematography crew, headed by the cinematographer; the lighting crew, headed by the gaffer (*osta eda2a*); the gripping crew, headed by the key grip (*osta crane* or *osta Panther*); and the camera crew, headed by the chief camera technician (*osta camera*)⁶⁶. The cinematographer hires his cameraman (when he himself is not the one manipulating

⁶⁵ Unlike the editor or the musical composer, who are artistic postproduction workers, the colorist and the graphic designers have no say over the movie's aesthetics, which is why the cinematographer is expected to sit next to both technicians while they work on their machines. Film companies are increasingly equipped with their own editing stations (i.e. Mac computers with Final Cut Pro software), but coloring and video-effects are still done in specialized postproduction venues (e.g. Aroma, TimeCode). Thus, unlike editors and composers who work by contract with various projects, colorists and graphic designers tend to be permanently hired in postproduction companies.

⁶⁶ In addition to the core camera crew, a new position has appeared with digital cinema, which is alternatively referred to as 'edit-camera' or 'operator'. This operator works with the camera crew in order to transfer all digital material filmed on set onto several hard drives, which contain the film material sent to the editing office with all additional backups.

the camera), his focus puller, his lighting script, and his gaffer. The chief camera technician is selected by the equipment rental company, while the key grip is usually hired by the director according to Farghalli, since the director has the final say over camera movement. These sub-team heads choose their own crew and bring their own equipment⁶⁷ (e.g. camera, lenses, lights, gels, dollies and dolly tracks). Given such responsibilities, these heads enjoy a relatively high status by comparison with runners, extras, or even their hierarchical subordinates. Yet, their positioning as manual workers coming from ‘popular’ (*sha3bi*) backgrounds gives them less prestige than the higher-end, artistic crew members. Indeed, the very use of the term ‘*osta*’ to designate these workers, a term equally applied to master craftsmen in Cairo (see Elyachar, 2005: 100), indicates their relatively lower status as ‘technical’ workers.

The crew in each sub-team specializes in executing one aspect of image-related work: the cameraman adjusts camera settings and manipulates the camera while shooting; the focus puller replaces lenses and filters while adjusting the depth-of-field⁶⁸; the lighting script notes down all visible sources of light to ensure lighting continuity between discontinuous takes; the gaffer rigs all lighting equipment; the key grip rigs all camera motions; the chief camera technician carries around the camera on set. The complexities involved in coordinating all these tasks explain why the cinematographer in *Décor*, Tarek Hefny, told me that it is useful to work with a similar crew over several projects – this

⁶⁷ In Egypt, equipment is fully or partially owned by production companies or by the very individuals who use it. For instance, cinematographers can have a share in the camera that they use on set; gaffers own lights, gels, boards, flags, etc.; key grips own at least a dolly with tracks, stubs, additional motion equipment, etc. In some cases, equipment is rented out by specialist companies, but the very equipment in these companies is owned by other corporations or people in the industry. Take Focus, the largest camera-hiring company in the Egyptian media industry: while the company manages several cinema cameras (with attending equipment, like lenses and filters), the very cameras in the company are not directly owned by it. New Century, to take one example, owns two Alexa cameras managed by Focus, while several cinematographers have various shares in each camera, whose returns are divided accordingly when a camera is rented out to various sets.

⁶⁸ The depth-of-field designates the area of the film image which seems ‘sharp’, or ‘in focus’. A ‘deep’ depth-of-field is one where photographic subjects can move far and close to the camera without going out of focus (Orson Welles’ *Citizen Kane* offers a classical example in this respect). A ‘shallow’ depth-of-field, by contrast, is one where objects have only a narrow margin of movement in depth until they become out of focus.

way, he said, everyone will have ‘the same mindset’ (*nafs el-dema8*), especially when it comes to think through artistic issues.

Much like in the production team, the hierarchical division in each cinematography sub-team is primarily a matter of skill (*shatara*). Once, I asked Mahmoud Morsi (gaffer) how his lighting crew was organized. He delineated a division between him, the best boy, the first and second assistants, and the trainees. When I asked in what way each worker is different, he marked a brief pause. I prompted him by asking whether it is a matter of task definition, and he said no, because everyone in the lighting sub-team is expected to know how to carry lighting equipment, how to plug lamps, how to rig lamps on stands or on walls, and so on. I asked him whether it is a matter of experience (*5ebra*), and he said no again, because some gaffers have little experience yet manage to climb to the top of the profession very quickly – very much like what Hany (production assistant) described among production crew members in section II. In the end, Morsi said that the hierarchy was a matter of knowledge (*3elm*) and skill (*shatara*). In this sense, the gaffer, the key grip, and the chief camera technician are supposedly the most skilled at all tasks required in their sub-team, while the ‘best boys’ are the second-best skilled, and so on down the hierarchical ladder.

B) Art direction: The art direction team is organized along similar lines to the cinematography team, coordinating several relatively autonomous sub-teams. The art director (*mohandes dikor*) makes all artistic decisions concerning set design and prop hiring. Unlike the American production designer, who is expected to supervise the film’s overall style, Egyptian art directors are directly tasked with designing and executing all sets (a job normally reserved to the ‘art director’ and the ‘set designer’ in Hollywood), as well as being directly involved in designing or choosing all props (a job normally reserved

to the ‘prop master’ in Hollywood). Much like the French *chef décorateur*, then, the Egyptian art director concentrates all authority over the ‘background’ of the film image. In Hollywood, this authority is distributed among several creative crew members. The art director manages a very large team of workers – 10 to 30 crew members, depending on the workforce needed to build the set. This team is divided across three sub-teams: the core art direction crew, with the first assistant art director and his assistants; the prop crew, headed by the prop master (*osta akseswar*); and the set-building crew, headed by the chief builder (*monaffez dikor*).

In *Décor*, the first assistant Mohammed Ezzat followed-up on the execution of Asem Ali and Nihal Farouk’s designs, whether in prop acquisition or in set building. The prop crew, for its part, was hired by the prop master Mohammed Seyaha, who was said to be the most skilled worker in his sub-team, like the gaffer or the key grip⁶⁹. The building crew is hired by a chief builder, who supervises all craftsmen (*3ommal*, sing. *3amel*) involved in building sets or arranging apartments. From my experience in *Décor*, the most important craftsmen are the carpenters (*naggarin*, sing. *naggar*), the painters (*na22ashin*, sing. *na22ash*), the varnishers (*ostorgeyya*, sing. *ostorgi*). The former build the basic structure of the set and all wooden-made props, while the latter two respectively sand and paint all surfaces, and lay the finishing touch on anything varnished (e.g. parquet, furniture). Other building workers are hired according to the production’s needs. An electrician (*kahraba2i selesion*) was called in *Décor* whenever there was work with an apartment’s electricity or a set’s non-cinema lights. Likewise, the glass worker, the metal worker, the plumber, and the upholsterer were called whenever needed. While the chief

⁶⁹ The prop master’s *shatara* is partly financial, partly aesthetic. He needs to be able to hire or buy all props needed at the lowest possible cost and in the exact ‘reference’ image given by the art director or his assistant. In *Décor*, this image was usually a digital prop picture, and the prop master was expected to either get the exact same prop or a prop in a similar ‘style’, according to an accepted typology of props in the industry (e.g. ‘modern’, ‘1960s’, ‘classic’). Until they have proven such skill, prop assistants are simply asked to move around props on set and, in cases where props are hired, to bring them back to their storage place when the shooting is over.

builder supervises the whole building operation, each craft is headed by a ‘lead’ worker (commonly called *osta*, like the gaffers and grips, although they have a lower status in the industry’s hierarchy). Training and promotion, again, are akin to the cinematography sub-teams: trainee carpenters are brought to observe work, and with time, they can be promoted to work directly in set-building operations and, later, to supervise these operations as chief builders⁷⁰.

C) *Styling*: The styling team is relatively recent in the Egyptian film industry. According to my interlocutors, one can trace its establishment to the early 2000s⁷¹. Previously, costumes were under the art director’s supervision⁷², while hairstyle and make-up (as well as costumes, in some cases) were left to the actor’s attention. All these elements are now assigned to the stylist, who overviews all decisions concerning the actor’s look – hair, make-up, and costume, much like the ‘HMC’ department in the United States and in France (Rot, 2014: 22). The stylist in *Décor*, Salma Sami, was helped by one assistant at any one time, and together they worked to design, acquire, and keep track of costumes, while making sure to dress each actor appropriately on set (with the help of Mariam el-Bagoury, the costume script). Costumes may be designed specifically for a given film, especially in the case of period dramas, but the usual practice in today’s industry is to

⁷⁰ Chief builders are always carpenters. As Hussein Wezza once told me, the carpenter is the essential cinema craftsman, since he knows all set building operations ‘from the first to the last nail’ (*men awwel l2a5er mosmar*). A carpenter’s ascension to the head of his team’s hierarchy can be ascribed to his *shatara*, but the fact that only a carpenter can become a chief builder hints at the implicit hierarchy of crafts in set building, where painters and varnishers are deemed to lack the synthetic expertise of carpenters to supervise building.

⁷¹ Given its relative newness, the stylist position can be greatly undervalued. Ahmed Farghalli saw no use to the position, since he considered styling work as simply involving ‘clothing actors’, which can be done by a lowly assistant actor (*labbis*). Moreover, the stylist’s authority over the actor’s look can be overlooked by more powerful actors, especially stars, who may judge that they are more apt at choosing ‘nice clothes’. Conflicts between the stylist and the stars are understandable given the stylist’s relatively recent authority over artistic matters in costume design, when actors were – and, in some cases, are still – expected to wear their own clothes.

⁷² In the 1970s, Chadi Abdelsalam, who is widely recognized as the greatest art director in Egyptian history, would design himself all sets *and* costumes in his films. Each task was then put under the supervision of his students, both of whom became great art directors in later years: the late Salah Marei and Onsi Abu Seif.

borrow from a company's storage or an actor's wardrobe, or else to buy clothes in any commercial boutique in Cairo. The latter practice has been extensively documented in contemporary Bollywood (see Wilkinson-Weber, 2005; 2010; 2014). In this context, the chief costumer (*monaffez malabes*), who was supposed to supervise the execution of the stylist's designs prior to the 2000s, is simply made to oversee the daily maintenance of costumes – a task whose execution is shared with his assistants. Next to costume work, the hairstylist and the make-up artist execute or, in cases where assistants take execution in charge, supervise the execution of hairstyles and make-up as determined by the stylist. Stars can bring their own hairstyling and make-up crew, which means that the production's hairstylist or make-up artist works with secondary actors and extras in my experience. Unless he was personally demanded by the star, the hairstylist or make-up artist in *Décor* would leave his assistants on set in order to execute basic hairstyles and make-ups and, whenever needed, additional touch-ups in between takes.

D) Sound: In contrast with all image-related teams, the sound team in Egypt is neglected by Euro-American standards. This contrast was initially brought to my attention by Egyptian sound engineers, who insisted that whereas American movies hire at least 20 to 30 crew members to work on all aspects of sound recording, design, and postproduction, Egyptian movies are left with meagre human and financial resources to create a good soundtrack. There are two sound-specific positions on Egyptian sets. The sound engineer (*mohandes sot*) is responsible for recording all sounds on set, while ensuring the general quality of recorded sound (e.g. avoiding background noise; ensuring dialogue is loud enough). The boom operator (*girafist*), on his part, installs individual microphones on actors and holds the boom microphone while recording on set. In larger productions, additional sound assistants are hired to install ambient microphones and heavy recording

equipment, but these roles were reserved to the lone boom operator in both *Décor* and *Poisonous Roses*⁷³. In postproduction, the sound editor cleans the recorded soundtrack with dialogue and ambient sound of all noises. The sound mixer harmonizes the film's image with the dialogue soundtrack, various effect tracks, and the composer's music. While editors and mixers are expected to hire some assistants to help with menial postproduction tasks (like cleaning tracks, creating sound effects, or exporting material), many work entirely on their own. This can leave the Egyptian sound crew with three to four workers in total, knowing that the sound editor is always the same person as the sound engineer in today's digitized industry.

VI. 'Artistic' and 'Executive' Labor

In this chapter, I have described the labor hierarchies enacted, by and large, in everyday commercial filmmaking activities in Egypt. As I will detail in chapters 5 and 6, there are moments where the daily contingencies of filmmaking shake the hierarchy's regularity, but it is certainly the grounding assumption behind the division of labor in the contemporary industry. In this sense, one should note that 'the commercial nature of a media industry does not render its structure or organization transparent. For example, while the Hindi film industry is a commercially driven, blockbuster-oriented industry, its structures of financing and distribution, sites of power, organization of labor, and overall work culture are quite

⁷³ According to the young boom operator Ahmad Rashdan, sound crew members are among the fastest in getting promoted in their team's hierarchy. In some cases, a student in his fourth year at the High Cinema Institute can cumulate enough experience and contacts to become a full-time sound engineer. This pattern of fast promotion could be linked to the overall neglect of sound recording. As Rashdan told me, producers prefer to save money on hiring inexperienced sound engineers in exchange of a mediocre yet satisfactory quality of recording. Several editors lament the general neglect of sound recording and postproduction in Egypt, since they argue that sound is exactly half of a film (the other half being the image). Producers, however, are generally unwilling to give additional attention to sound.

distinct from media industries located in the US' (Ganti, 2014: 17). This observation holds just as well in Egypt. The industry's entrenchment in Egyptian labor practices – e.g. its parallels with local craftsmanship – has produced a somewhat distinctive organization of labor within particular historical bounds, roughly corresponding to the post-2000s era outlined in chapter 1. Acknowledging this organization is necessary to understanding the everyday work of filmmaking and, more specifically, the filmmakers' mediation of imponderable problems. In particular, the distinction between 'artistic' (*fanni*) and 'executive' (*tanfizi*) labor is a central assumption undergirding this mediation.

As I have noted in introduction, the term 'artistic' is used in two ways in the Egyptian film industry: as a tool of professional 'boundary-work' (Ganti, 2012: 7) *and* as a set of practices associated with the film's aesthetic appearance. Unlike the above-the-line vs. below-the-line distinction in Hollywood (Wasko, 2003: 33), the artistic vs. executive distinction is never mentioned as an explicit principle of labor hierarchy in Egypt. Moreover, it is not recognized as neatly as I have laid it out. Sound engineers, for instance, can be considered as 'executive' workers, since they can be seen as mere appendages to sound-recording equipment, having no artistic say on the recorded sound environment beyond 'pressing the record button' as is sometimes joked. The sound engineers in *Décor* and *Poisonous Roses*, however, were seen to decide over the sonic environment of the film's world, just like the screenwriter decides over the film's plotline and dialogue, or the cinematographer decides over the image's lighting, or the art director decides over set and prop design. These artistic decisions are executed by a hierarchy of assistants in relevant teams or sub-teams. Ultimately, they are overseen by the director, which makes him/her the seat of authority in all artistic matters.

While there is no denying that there is a great deal of collaboration in film production, only a limited number of workers are legitimately able to influence the film product. As Powdermaker remarked in 1940s Hollywood,

The personalities of those who sit in the front office, of producers, directors, actors, writers, and others (...) influence the creative aspects of movie production and leave their imprint on the movies. Although no movie could be made without cameramen, set designers, musicians, costume and make-up departments, carpenters, electricians and many others, these have relatively little influence on the content and meaning. (1950: 10)

While the set of social agents endowed with artistic authority in Egypt is somewhat distinct, what Powdermaker describes is precisely the effect of a concentration of artistic decision-making in the ‘legitimate’ hands of a few workers. These workers, in turn, can claim authorship over ‘their work’ by virtue of their direct authority over certain artistic decisions in the making of the film, not necessarily because they actually executed all the tasks required to physically make the film. When a director tells an actor to walk slowly in order to match the camera’s movement, the actor will almost certainly move slowly; when a cinematographer tells a gaffer to light an actor’s back with a 2K light, he will almost certainly light the actor’s back. I say ‘almost certainly’ because, in some cases, execution might fail: an actor may not move as slowly as the director wants, or a gaffer may be unable to rig a light securely enough. That said, it is extremely rare that the artistic worker’s command will be willingly disobeyed in my experience, except when disobedience comes in the wake of an artistic disagreement between two artistic crew members – e.g. a director disagreeing with a cinematographer’s lighting choice; or a star disagreeing with a stylist’s costume choice.

In a sense, labor hierarchies in the Egyptian film industry are devised to separate the ‘creativity’ (*ebda3*) of artistic workers from more ‘technical’, ‘logistical’ or ‘executive’ concerns. Artistry in this context does not simply lie in an individual’s skill, but also in the

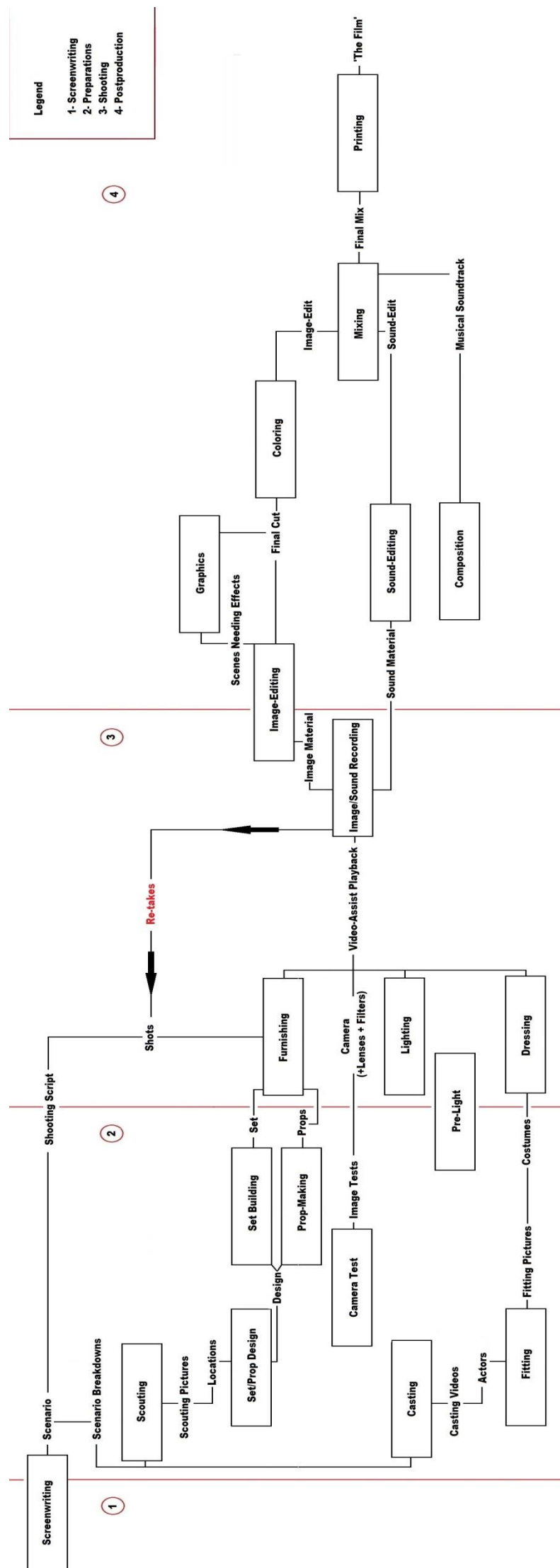
labor hierarchy binding him/her to other cast and crew members. For example, Omar el-Zohairy could be deemed a ‘more creative’ individual than Ahmad Abdalla, yet the specific hierarchy binding him (as an AD) to Abdalla (as a director) makes him liable to obey every single artistic command given by his superior – and likewise with all relations between artistic crew members and executive ones. This creates a situation where, independently of one’s personal proclivities, the worker holding the role of ‘cinematographer’ or ‘art director’ or, better yet, ‘director’ will be deferred to in artistic matters. This authority is not absolute, and it is indeed challenged by logistical imperatives and artistic disagreements, but this ideal-typical model of creation never gives the final say to ‘executive’ workers. As Darré notes in the French film industry,

In practice, indeed, the director feeds off the ideas of his collaborators as well as his actors; he chooses out of different options proposed to him; he composes the film with his collaborators. Yet, these collaborators – technicians who, like him, came to cinema with the idea of directing and who finally have settled their ambitions by contributing to the work of others – do not pretend, generally speaking, to share the work’s authorship (*paternité*). In the name of the notion of ‘author’ upon which their vocation was built, they most often consider that the ideas that they can bring to the director belong to him. Taking most of their greatness from the greatness of the one they serve, they do not theoretically aspire to the public recognition reserved to him. This does not exclude internal tensions, which are sometimes publicly expressed, between their original vocation as creators, common to most technicians, and a symbolic division of labor which objectively denies their share in creation. (2006: 126-127)

Notice that the association between a director’s artistic views and the movie’s content is not unmediated, as an unrefined version of *auteur* theory would have it, but it is precisely possible *because* the industry’s division of labor isolates the artistic worker’s individuality or, to use Powdermaker’s term, his ‘personality’. The notion of creativity that is thereby implied is a negative one: the artistic worker is in essence someone who can *exclude* creative possibilities in the movie, independently of which possibilities s/he chooses to include. This is not to say that all films are the inevitable outcome of a perfect artistic

intention. In chapters 5 to 7, I will insist on the logistical and communicational contingencies that can subvert this intention. What is clear, however, is that the distinction between ‘artistic’ and ‘executive’ workers is a central assumption guiding the way in which Egyptian filmmakers divide their day-to-day tasks and, by extension, cope with the imponderability of their activity.

Figure 3 - The Operational Sequence of Egyptian Film Production



Chapter 3

The Process of Film Production

I. To Describe a 'Process'

To my mind, there is a genuine sense in which filmmaking is a teleological process. This is not to say that ‘the film’ is an ideal artwork. In line with Grimaud’s remark in Bollywood, ‘cinema will force us to “decentre” the analysis of creative processes that have been, so far, a little too centered on a scenario, an author, an imaginary or a language, since filmic material, in order to be constituted, implies multiple little contributions, each with its own temporality, and not all of which are reducible to them [i.e. the scenario, the author, and the imaginary]’ (2003: 11). To say that the film is a revealed Ideal would be misguided in this sense, since it eliminates the imponderability of the shooting’s planning and execution (chapter 5); of the film’s final form (chapter 6); let alone the audience to which it is destined (chapter 7). I would still argue that ‘the film’ exists as an ultimate goal for individual filmmakers, a *telos* towards which the production process is driving. If we are to describe the filmmaking process, then, we need to start from the recognition that ‘the film’, although it does not exist right now, is expected to exist later, and that its existence depends on a specific series of ‘things’ happening.

I could describe these ‘things’ with a wide variety of methodological languages. For instance, I could produce an ethno-historical account of all significant events in *Décor* or in *Poisonous Roses*, with a detailed description of involved parties and exchanged conversations. Alternatively, using the language of practice theory (Bourdieu, 1977), I could trace the way in which filmmakers in the industry’s ‘field’ produce movies

according to their objective position (class-wise, gender-wise, status-wise) and their subjective *habitus*, their predisposition to make movies in a certain way. Using the language of the sociology of translation (see Latour & Woolgar, 1979; Callon, 1986), I could describe how human and nonhuman actants combine movie material across several mediating phases leading onto a movie's stable inscription (much like scientists combine materials to create scientific facts). Each language would bring a different angle to the description: the ethno-historical account would bring us into the depth of production events; the 'practice' account would highlight how filmmakers use and enact existing structures in their daily improvisations; the translation account would restore a much needed attention to the film's material inscription, in addition to the various phases through which it passes before becoming a recognizable product. With all these languages, however, one would still get a dissatisfying sense of film production *as a process*, because these descriptions could not account for the *efficacious technical actions* invested in cinematic creation. While each account would give an idea of 'real-time' production work in various guises (as a chronological series of events, as a series of situated decisions in action, as a series of human/nonhuman interactions), they all omit the temporal teleology leading onto the making of 'the film' in the future.

This teleology, I argue, is better described with the operational sequence method perfected by the French school in the anthropology of technology (Lemonnier, 1976; 1992; 2004; Balfet, 1991; Coupaye, 2009; Cresswell, 2010 [1976]). This method was greatly influenced by Mauss' definition of technique as a 'traditional, efficacious act (...) felt by [its] author as an act of physical, chemical, or physical-chemical order' (1999: 372). The operational sequence, with this definition in mind, is 'the set of operations organized and effectuated by a human group, here and now, according to the means at its disposal, including the technical knowledge it masters, in order to arrive at a [physical] result'

(Balfet, 1991: 12). This method is designed to follow, on one hand, how humans act on matter in a series of more-or-less individuated operations, and on the other hand, how meaning is embedded in these co-dependent physically efficient acts. In this chapter, I will depart from the French school in the anthropology of technology insofar as I will not be interested in the imbrications of social representations in technical action. Rather, I will attend to the way in which social agents come to understand the future of their activity through everyday socio-technical actions. This future-orientation, I argue, is most visible in the written and visual mediators produced by each operation in succession – whether the scenario, or scouting pictures, or video-assist images, or sound-editing ‘*references*’. The meaning of these mediators is not inherent to their immediate technical production or to their social context: it emerges from their anticipatory potential, within an extended production process (see figure 3).

Overall, the operational sequence method presents two main advantages over well-known approaches to the study of objects in Anglo-American anthropology – namely, the ‘follow-the-object’ approach used to analyze the social biography of things (see Appadurai, 1986); and the consumption-centered approach designed to explore the synchronic embedding of objects in social relations (see Miller, 1987). In operational sequences, social meaning is not just materialized in objects acting and circulating across various sites of consumption: it is embedded in a chain of co-dependent physical operations, each producing a set of mediators which, crucially to the core argument in this thesis, contribute to mediating the imponderability of complex production processes. By allowing the analyst to map the way in which technical actions are both executed immediately *and* embedded in previous and subsequent operations, the operational sequence explicates what makes commercial film production *imponderable*, as opposed to being entirely *unpredictable*. No less than the filmmaker, the analyst cannot grasp the

filmmaking process without gaining awareness of this sequence, even though it is not known in the same way by every single analyst or every single filmmaker (see section VI). In short, the description of the operational sequence of Egyptian film production is intended to sustain a wider analytical point: that is, that every technical action in filmmaking is invested, in its physical execution, with the everyday anticipation of future operations, thereby making the overall process present in the filmmaker's daily work.

There remains an important descriptive difficulty – namely, how to establish a clear beginning and ending to the sequence. It is difficult to know whether a movie project will ever become an actual film in its initial stages. Moreover, different crew members are contracted at different points in the project's unfolding. In *Décor*, for instance, the art directors Asem Ali and Nihal Farouk started working about two weeks prior to the stylist Salma Sami, while some assistants were hired several weeks into preparations. Likewise, gaffer and grip teams were done with the project once shooting was over, even though 'the film' was not released until several months later. In other words, 'the film' begins and ends at different points for different crew members, if it ever reaches past screenwriting or preparations. This analytical difficulty is not peculiar to the Egyptian film industry, or even to filmmaking as a production process. Media anthropologists tend to solve this difficulty by arguing that 'the film' is an ever-changing process/product whose circulation entails various definitions as it moves across sites of production and consumption. This solution is most clearly presented in Hoek's work on Bangladeshi 'cut-pieces' (2014), where she meticulously shows how a particular action movie is constantly modified across its writing, shooting, postproduction, and circulation in movie theatres in rural Bangladesh.

This position is analytically sound: it is indeed the case that *Décor* gained a different definition when it was only a scenario in Cairo, or a rough cut watched by the mixer in Greece, or a projection on the opening night of the 2014 Cairo International Film

Festival. However, when it comes to describing the filmmaker's apprehension of the future-orientation of her work, it is unhelpful to stress the malleability of 'the film' insofar as it seems to imply that there is no film to expect. As I mention in the conclusion, there are clear conventional horizons of expectation about the nature of the film product in Egypt. Filmmakers do indeed maintain a qualitative distinction between the operational sequence of filmmaking and the distribution/exhibition of the film product. This difference is informed by the kinds of workers involved in the sequence, as I have described in chapter 2, as well as the kinds of imponderable problems arising in its wake, as I will discuss in chapters 5 to 7.

For ease of description, then, I will rely on existing emic categories to distinguish various stages and operations in Egyptian film production, setting its start at screenwriting and its ending at printing. On a broad level, Egyptian film production can be divided in four overarching stages: 1) screenwriting (*ketaba*); 2) preparations (*ta7dir*); 3) shooting (*taswir*); and 4) postproduction (*el-bost*⁷⁴). These stages can roughly be mapped onto the 'preproduction-principal photography-postproduction' triptych in Euro-American industries, yet the operations constituting each stage are somewhat distinct in Egypt. To give a concrete example, the boundary between screenwriting and preparations is more flexible in Egypt by contrast with Hollywood, where script development is sharply antecedent to preproduction (Wasko, 2003: 36-37). That said, each stage comprises operations with socio-technical effects going into the next stage: screenwriting produces a scenario which will 'guide' preparations; preparations produce all elements (i.e. actors, costumes, sets, props, camera equipment) necessary to shooting; shooting produces all

⁷⁴ The word '*bost*' (which is an Arabized version of 'post'-production) has gained currency in today's Egyptian film industry. The overall postproduction process is still metonymically known as '*montaj*', which was, like in France, the more common word until the advent of digital technology (and attending English vocabulary). Today, *montaj* (editing) is technically one among many postproduction operations (including coloring and mixing), which is why some filmmakers insist on using the word '*bost*' to avoid confusion between image editing and the movie's overall postproduction.

audiovisual material manipulated in postproduction; postproduction produces ‘the film’ out of this material.

II. Screenwriting

Screenwriting (or simply ‘writing’, *ketaba*) is technically an act of graphic inscription. As such, it can be situated in a wider range of writing practices in Egyptian film production, including permit-making or scenario breakdowns. Yet screenwriting is different in being deemed an ‘artistic’ practice (see chapter 2), in addition to enjoying a more flexible timeline⁷⁵. Unlike ‘non-artistic’ writing practices, screenwriting is not a linear exercise in graphic inscription. The AD may write a scenario breakdown and go over it several times, but he will review it as he reviews a grocery list, making sure that none of the logistical elements in the scenario escaped his attention. The screenwriter, by contrast, goes over each scene several times to make sure that it communicates the meaning (*ma3na*, pl. *ma3ani*) that s/he wants, scrapping certain sentences, putting them back, writing additional dialogue for her characters, cancelling entire scenes, and so on. Consider the following scene in *Poisonous Roses*:

EXT. SHOE WORKSHOP. TANNERY STREETS. DAY

The NOISE of TANNERY MACHINES is mixed with RADIO SOUNDS.

TAHEYA stands in front of a middle-aged SHOEMAKER, who is sewing a leather shoe on a small table with a flaming gas lamp. A small light falling from the ceiling lights his

⁷⁵ A screenwriter who receives funding from international organizations to develop his scenario may take months if not years to complete it. This was the case with Ahmad Fawzi Saleh in *Poisonous Roses*, who even went through a re-writing phase while shooting in 2015. A screenwriter who is commissioned by a particular star to write a scenario or by a particular company to adapt a non-Egyptian movie, to take two common cases, may be pressured to finish his scenario according to the patron’s schedule.

face, while behind him lie disorganized piles of leather with both finished and unfinished shoes.

TAHEYA gives the SHOEMAKER a sheet with the outline of Saqr's foot.

TAHEYA

I want a nice shoe, this size.
Something chic, imported leather.

The SHOEMAKER nods in approval and takes the sheet.

TAHEYA gets out of the workshop and sees OM SAQR carrying some finished leather jackets on her back.

CUT

This scene occurs at a diegetic moment where the protagonist, Taheya, orders new shoes to gift her brother, Saqr, whom she wants to keep by her side against his will. In the versions of the scenario that I had first seen, in 2013, this scene did not exist. When the screenwriter-director Ahmad Fawzi Saleh initially thought to include this scene, it was supposed to take place in front of a high-end lingerie boutique in downtown Cairo. He had three reasons, broadly, to include such a scene in the scenario: to explain to the viewer that Taheya cares enough about her brother to spend money on him; to show underwear shop windows in downtown Cairo, whose visual provocation stimulated him; and to show class inequality between the poor Taheya and the rich boutiques in downtown Cairo. The scene was originally silent, and it simply involved Taheya walking by several neon-lit shops before finding a suitable one, out of which she walked with a yellow plastic bag following a cut.

The scene pasted above is admittedly different to the one described in the previous paragraph, yet it emerged out of the same text in word-processed format, in the same diegetic position. The latest version was written in Arabic in the summer of 2015, and I translated it as above for a grant application to the Doha Film Institute. After an initial

shooting bout in *Poisonous Roses*, where the downtown scene was not shot, and with the understanding that Taheya had now become the protagonist after the earlier scenario was scripted to follow Saqr's narrative, Fawzi had decided that it no longer made sense to have the 'home-to-work' Taheya suddenly visiting a new neighborhood just to show class inequality to the viewer. In our three-way conversations with his AD, Yousef Abodan, Fawzi thought it more powerful (*aqwa*) to show a new location outside the tanning workshops, yet within the same district, while keeping to the intended meaning of showing Taheya's care for her brother. This new scene had the additional advantage of being less costly in shooting, which was a constant concern on Fawzi's mind while re-writing his scenario.

Starting with the text of the downtown scene in a shared Google Docs document, Fawzi rewrote the scene with Abodan and me to include a detailed description of the workshop, some dialogue between Taheya and the shoemaker, as well as what Fawzi sensed to be a greater token of care for Saqr: an outline of his shoe size. The line at the very end of the scene, where Taheya sees her mother, Om Saqr, passing by with a pile of leather over her back, was added even later in the summer of 2015. When Fawzi and I reviewed the sequential outline of each character's appearances throughout the scenario, which we had made as a separate handwritten note, it seemed that Om Saqr's character was absent too long in between two major points in the plotline. This is why I proposed (and Fawzi agreed) to include her briefly in this scene, such that the viewer can see the character in a new setting (since she was never seen in her leather jacket workshop), and without burdening other scenes with too much action (which was a recurrent concern in our screenwriting talks).

The iterative exercise involved in writing and re-writing this scene in *Poisonous Roses* shows the contrast between screenwriting and other acts of graphic inscription.

Screenwriting involves a great many more artistic choices, which are mulled over by the screenwriter and, as the case may be, his collaborators. These choices did not go without saying in *Poisonous Roses*, and they relied on various considerations invoked simultaneously by Fawzi: for instance, what the film should look like visually; whether its plotline ‘makes sense’ (*manteqi*) according to an implicit ideology of realism; whether it enacts Fawzi’s ‘vision’ of class struggle in Cairo; whether it gives sufficient attention to Taheya’s character; whether it will cost a lot or not; and so on. This kind of iterative practice is not unique to the Egyptian film industry, but it is certainly a distinguishing feature of filmmaking by contrast with other complex socio-technical activities. While iteration is a central facet in screenwriting, it is not conceived in the same manner by all screenwriters. Wahid Hamed, Egypt’s best known screenwriter, told me in interview that he writes one page at a time, reads the page once, and if it pleases him, he keeps it – if not, it is thrown away. In my experience with Fawzi, by contrast, entire scenes are inserted, removed, and reinserted in successive word-processed versions. To give another example in *Poisonous Roses*, a scene where Nahed’s bourgeois friends overtly snub her boyfriend Saqr was removed and reinserted to the tune of our varying judgments concerning the degree to which the boyfriend’s class struggle was manifest in successive versions of the scenario. The scene was ultimately removed in the latest version, where we decided to exclude any scene which was not written from Taheya’s perspective. In any case, screenwriters use different strategies to create/eliminate sentences in the written scenario – e.g. individual reading and rewriting, workshop-like discussions with trusted readers, or co-writing with the director.

In Egypt, the scenario is seen as a core written mediator, which will guide preparations, shooting, and postproduction. It is not the *only* document in use, as I detail below, but it remains crucial in setting the different characters to be cast, the locations to

be chosen, the props to be made, the costumes to be bought, the shots to be taken, and the structure (*bona*) of the image-edit. Still, one would be hard-pressed to find anything in the scenario *compelling* its execution. The object, whether a digital document sitting on the screenwriter's computer or a printed copy in the actor's lodge, is somewhat inconsequential to its enactment in preparations or in shooting, let alone in postproduction, where audiovisual material is reconfigured in ways unforeseen by the screenwriter. This technical situation makes the scenario into an unstable document in Bombay (Grimaud, 2003: 77-97) or in Dhaka (Hoek, 2014: 33-58), because it is constantly subverted throughout the filmmaking process, whether in shooting, in postproduction, or even in projection halls. The question, then, is in what sense a scenario 'guides' the execution of a film in Egypt?

As will become apparent in sections III to VI, the scenario stands as a different artifact to different crew members: to the screenwriter, it may be 'the film'; to the actor, it may be a set of dialogue lines; to the line producer, it may be a list of logistical demands prior to shooting; to the cinematographer, it may be a set of images and colors. The well-known screenwriter Mariam Naoum says that crew members in television serials prefer 'French'-style scenarios, where the page is conventionally divided in two columns, with description to the right and dialogue to the left. This preference, according to Naoum, can be explained by the fact that actors only have to read the left side of the page while the production team only has to read the right side. This statement points to ways in which the Egyptian scenario 'guides' film production. On one hand, only specific parts in the scenario stand as relevant signs to different crew members (e.g. the left- or the right-hand column); on the other, there are writing conventions organizing how a scenario is physically inscribed, like the 'French' style or the 'American' style (viz., where description and dialogue are layered in a vertical sequence). As Naoum further explains,

the scenario is supposed to leave artistic workers some room to imagine their own part in the film. Thus, it should not offer detailed descriptions of frame size and camera movement (which are decided by the director); and it should not give perfectly detailed compositions (*takwinat*, sing. *takwin*), which are decided by the cinematographer.

III. Preparations

The scenario's closest technical extension is the shooting script (*dikoupaj*), which is prepared by the director⁷⁶. Overall, it consists in a division of each scene into a list of shots (*shottat*, sing. *shot*), which are a succession of camera angles/movements framing the expected capture of audiovisual material in shooting. Depending on the director, the shooting script may not be complete before shooting, and some directors even like to improvise their shots on set, like Ahmad Abdalla and Ahmad Fawzi Saleh. In *Décor* and *Poisonous Roses*, both directors carried some mediating writing or image to organize the shots that they sought and, more importantly, to try to visualize the film's imponderable image. Fawzi carried out rehearsals on camera movement with his small Nikon camera prior to every shooting location, using the resulting video as a guide to the shots he wanted to take on set. While observing Ahmad Abdalla, however, it became apparent that he made a preliminary list of shots on his own scenario copy in *Décor*. He simultaneously took still

⁷⁶ Shooting scripts vary greatly in their form according to each director's preference. To give a few examples, the director Akram Farid insisted that the shooting script be completed before entering in shooting, and he suggested that his script consisted in a list of shots written in a printed scenario. In *Décor*, by contrast, Ahmad Abdalla did not have a set shooting script except in our shooting days in Alexandria, where he printed a PDF list of shots with accompanying digital pictures comprising each envisaged angle. On the set of *Out of the Ordinary*, I was told by the clapper that Daoud Abdel Sayyed would communicate his shots to his AD, who would in turn communicate these shots to his assistants, all on the beginning of the shooting day. Ahmad Fawzi Saleh, in *Poisonous Roses*, did not produce a shooting script in any shape, although he would regularly scout the shooting locations and shoot short videos where he mimicked his 'master' shot in each scene (viz. a one-shot follow on a character), while trying two to three fixed angles to supplement this master cut.

pictures with a small camera that was constantly around his neck, which served to communicate the particular angles and composition he wanted to his artistic crew. Still, both directors did not resort to storyboarding or sound planning in any detailed sense. Both practices, in fact, are unusual in the Egyptian film industry so far as I could ascertain.

As I have mentioned in section I, the boundary between screenwriting and preparations is blurry in Egypt. Adjustments to the scenario go on well into preparations, and these adjustments have to be prepared prior to shooting. For example, preparations were well under way in *Décor* when Ahmad Abdalla and Mohammed and Shireen Diab (screenwriters) agreed on setting the closing scene in a movie theatre, where we would discover that the whole film was inside another film. The production team was then expected to find a movie theatre to shoot this additional scene (which was ultimately shot in one of New Century's downtown theatres, the Odeon). Zohairy (AD) was expected to cast all the theatre audience extras (which was done with his *regiseir* while we were shooting in a restaurant some weeks prior to the cinema shooting). The stylist Salma Sami was expected to give instructions to dress all these extras appropriately once they were cast. The key grip Mohammed el-Toukhy, lastly, had to find a large crane in order to shoot the master shot in the theatre (a one-shot sequence going out of the movie screen into the crowd, thereby showing that all of *Décor* was a film inside a film). These kinds of imbricated adjustments are essential to making the imponderability of planning and executing a shooting day contingent to the workers involved in preparations.

Although the scenario is always liable to get adjusted in the midst of preparations, the core work at this stage starts with a scenario version containing at least all main characters and locations. This initial scenario undertakes a complete breakdown (*tafri8*, pl.

tafri8at) by the AD and his assistants⁷⁷. While the breakdowns are the most exhaustive list of logistical elements needed in shooting, these written mediators are not linearly antecedent to the work of preparations. In all New Century productions to which I was privy, production teams started preparing in parallel with the AD's breakdowns. Some operations, however, were technically antecedent to others. Set design in non-studio locations, to give a concrete example, can only follow scouting, since the art directors cannot design an interior location without knowing its dimensions, its partitions, or its appearance. In relevant areas, then, I highlight which operations are logically dependent on previous operations.

A) Scouting: Scouting (*mo3ainat*, sing. *mo3aina*) is a complex operation involving several discrete steps, all aiming at securing shooting locations. First, locations are broken down in the scenario. In *Décor*, a preliminary breakdown was made by the AD and given in print to the production team, which started scouting the main locations before the complete breakdown was ready. Then, scouting pictures were gathered by the line producer Ahmed Farghalli⁷⁸, and 'legwork' production workers took to the streets every day in preparations to take these pictures⁷⁹. One night, I went on a scouting mission with the production

⁷⁷ Each assistant director has a different way of breaking down the scenario, as well as a different layout to her breakdown sheet (although all breakdowns I have seen are in digital format, as a table in a Word document or an Excel sheet). This operation took an intermediary calligraphic stage in Zohairy's case – with a printed scenario, colored pens and highlighters, and a significant deal of annotation to his scenario version. Still, finalizing the breakdown involved an inscription on computer software (e.g. Word, Excel, and MovieMagic). According to Zohairy, the AD needs to produce a general breakdown of all locations, characters, props, and costumes in the scenario, as well as a 'sequential' breakdown with all these elements divided by scene. While the sequential breakdown in *Décor* was useful in making the shooting schedule (see chapter 5), the general breakdowns were distributed to Farghalli, who distributed each breakdown in turn to the concerned team heads (e.g. the character breakdown to the stylist Salma Sami; the prop breakdown to the art directors Asem Ali and Nihal Farouk).

⁷⁸ In pre-digital times, this step did not exist. According to Farghalli, the production team would select some locations to scout, then immediately gather the artistic crew in a microbus and arrange a day to scout these locations in person. The wider availability of digital cameras has simply allowed artistic crew members to select their preferred locations in advance, which means that the production's pre-selection has become even more important and, arguably, involves a greater specialization of scouting tasks.

⁷⁹ Since they scout extensively over several projects, the production teams in New Century keep 'data' on scouted locations – although, as Farghalli told me, artistic crew members usually want to shoot in a

manager Mohammed Setohy in Dokki, in the area right next to New Century's office. Thanks to a local doorman (*bawwab*), Setohy made contact with Mamdouh, a local real estate 'broker' (*semsar*), and told him that he was looking for an apartment corresponding to the following specifications: it must be ready to shoot, unfurnished, with parquet, in 1960s style and, ideally, in a villa. These were the artistic crew's specifications for Sharif and Maha's apartment – i.e. the art director protagonists in *Décor*. Mamdouh thought a little about what he might show us, and he said, '*3andi men dah*' ('I got something like that').

After going to an apartment where the doorman was unavailable, Mamdouh took us to a 400 square-meter apartment in a nearby villa. Once inside, Setohy proceeded to take pictures with his small digital camera. He explained, as we went along, that he needs to take pictures in all four angles within each room. In corridors, he took pictures every two steps, presumably to give some sense of space when the images would be shown in a photo gallery on Farghalli's computer. On our way out, he took several pictures of stairs and the villa's external appearance, adding that he will need to come back by day to take pictures of what the villa looks like in natural daylight. Overall, he seemed satisfied with the villa, because it was exactly in the style that he was commissioned to find: old, 1960s, with wooden parquet, empty (or able to be emptied, as Mamdouh was quick to mention when Setohy asked about the furniture in place). When we came back to New Century's office, Setohy gave Farghalli his USB key with the latest scouting pictures. All photographed locations on Farghalli's computer were shown to the artistic crew, who established a

location 'never-before-seen-on-screen', which means that the production team has to scout anew in every project. In addition to their data, production teams have recourse to 'fixers' in order to secure locations in some neighborhoods in Cairo, or even in other Egyptian cities. Unlike professional 'scouts' in Euro-American industries, these fixers are akin to real estate agents. They act as brokers between the production team and a specific location, distributing payments to the local owners and taking a commission on their work, and they compile their own image data on the 'real estate' available for shooting in this area. These images, in addition to the scouting pictures gathered by the production team, are what artistic crew members see in order to pre-select shooting locations.

shortlist of locations to be viewed in person. The production team then condensed viewings on single scouting days, with all shortlisted locations, bringing artistic crew members on a microbus round to render their final decisions on each location.

These decisions were not taken in a straightforward way: in chapter 6, I return to the scouting operation as a prime illustration of the way in which an imponderable problem – what will the shooting location look like in the film – becomes mediated by a variety of crew members, conversations, and visual mediators like scouting pictures. In a sense, scouting pictures act as mediators between the artistic crew's 'pre-selection' of locations to be scouted in person and the production team's 'pre-pre-selection' based on daily scouting journeys and their interpretation of the artistic crew's demands. In both *Décor* and *Poisonous Roses*, final decisions were rendered after scouting in person. Nevertheless, scouting pictures were a core artifact out of which the artistic crew managed to 'see' the final film while in preparations.

B) Set-building, prop-making, and prop acquisition: Set-building (*bona*) and prop-making (*tasni3*) are similar operations. However, while prop design does not depend on earlier scouting, set design always depends on finalizing decisions in scouting (except in studio shooting, where the set design can begin while scouting is ongoing, as was the case in the Studio Misr shooting in *Décor*). After taking measurements, prop/set design proceeds either by computer or by hand, with different levels of precision according to the individual art director. In *Décor*, Nihal Farouk made scaled floor-plans for each location on the two-dimensional graphic design software AutoCAD, while Asem Ali and the assistant decorator Mohammed Ezzat filled 3D designs on the graphic design software SketchUp. The AutoCad sketches were two-dimensional representations of the overall positioning of rooms and big furniture pieces in each location, while the SketchUp

sketches included a level of detail down to the books and bibelots on the shelves in the protagonists' apartments. Once the set/prop design was complete, it was printed to be given to the chief builder or the craftsmen who would build a given set/prop item. These designs were annotated by hand, both by the art director and the craftsman, in order to include, for instance, some unspecified measurements or additional demands of materials. Thus, the printed design is a central mediator between the art director's idea and the builder's execution. In *Décor*, I have seen Wezza talking many times to Asem Ali or his assistant about a particular design on paper, to ensure that he would 'get it right' at critical moments in building, such as when wall-like *banohat* are joined in order to create rooms in studio, or when the door prop in *Décor*'s studio was being ornamented with the exact same design as the door inside Mostafa and Maha's apartment. Otherwise, as Wezza told me, Ali had no qualms about remaking an unfit set/prop item.

Once the printed design was taken by craftsmen, and once materials necessary to build the set/props were acquired (with the production's approval), the craftsmen in *Décor* started building the set and manufacturing props. I will not dwell on the technical details of the various crafts involved in set/prop building (e.g. carpentry, painting, varnishing, metal work, glass work). What I have come to understand, however, is that set-building craftsmen perceive an important difference between 'cinema' crafts and 'ordinary' crafts. Wezza told me that cinema craftsmen work faster, with any kind of material – and, as Ezzat added, with a keen eye on the 'finish' (*tafnish*). While the organization of labor among cinema craftsmen greatly resembles the one prevalent in non-cinema workshops (see Elyachar, 2005: 96-136), the carpenter who is not used to cinema work would take a longer time to make a chair with sturdier materials according to Wezza and Ezzat. The cinema carpenter, by contrast, could finish a chair in less time with any kind of wood, with an especial attention to the chair's look. This attention to the 'finish' is the prerogative of

the art director and his assistants, but it is safe to assume that the cinema craftsman's *savoir-faire* is adapted to building a good-looking chair as opposed to a sturdy one⁸⁰. While continuous with Egyptian craft practices, this specific *savoir-faire*, with attending aesthetic categories like the 'finish', are unique to the media industry.

In addition to manufactured props (*mosanna3at*), which are made by relevant crew members in the art direction team (e.g. wooden props are made by carpenters; paper props are made by the prop master), Ahmed Farghalli identified two more categories of props in Egypt. These are bought props (*moshtarawat*), which are acquired by the production or the prop master's team in one of Cairo's numerous shops or *sha3bi* markets (*sou2*), and rented props (*akseswar igar*), which are rented by the prop master's team in specialized prop storages. In *Décor*, decisions over which specific prop fell into what category were negotiated between the art directors and Farghalli, who sought to minimize cost by buying as few props as possible⁸¹. The art directors, in turn, would base their decisions on which props 'look better' in the film, as Farouk once laconically told me. These evaluations were made with the help of digital images, whether a list of digital pictures in the prop master Seyaha's 'data', or a list of digital pictures taken in prop storages, or pictures available on websites like Amazon.com. Having set their mind on a particular prop, and having agreed on its acquisition with Farghalli, both Ali and Farouk would provide a 'reference', a digital image, to orient the production team's or the prop master's acquisition. Much like

⁸⁰ This is clearly the case with cinema-specific objects, like the boards (*bano*, pl. *banohat*) used in lieu of walls in studio shooting. According to Ezzat, these walls need to look like 'real' walls, and this is why there is an increasing tendency in the industry to construct *banohat* with large 'MDF' (Medium-Density Fiber) boards. The previous technique involved laying a cardboard-like material (*karton*) on a jute-like surface (*5eish*). While the MDF boards are more expensive, they are superior according to Ezzat insofar as they give 'wall-like' smooth surfaces that can be painted easily. The older cardboard material would come off and would look 'fake' on camera if done 'improperly' (*men 8eir damir*) – a disastrous result according to Ezzat.

⁸¹ In theory, the line producer watches carefully over all expenses in the film, yet set/prop design and acquisition were always considered as areas of 'over-expenditure' by Farghalli. In cost-based terms, this creates a preference for buying fewer props (representing a one-off, low-end cost) over renting props (representing a daily, high-end cost, especially with antique pieces of furniture rented in specialized storages) or making props (which involves buying materials and paying workers by the day).

scouting, then, acquiring props is an exercise based on visual mediators acting as proxies between the art directors' initial design and the actual prop to be seen on camera.

C) Casting and fitting: In parallel with all previous operations, the AD starts a 'casting' in conjunction with his assistants and a *regiseir*. As I explained in chapter 2, stars are chosen prior to preparations: only secondary actors and extras undergo casting, which may involve reading a short scene in front of a camera, or being selected based on a *regiseir*'s video database. In both cases, casting relies on mediating images or videos, standing much like scouting pictures or 'reference' images between the director's discussion with his artistic crew and the actual characters in the film. As the experienced AD Wael Mandour told me, it is useful to get short casting videos with each audition, because it serves as a resource to both check the actor's look on camera *and* to review his performance in the course of further discussions on casting with the director. The physical importance of the casting image therefore lies in inscribing local notions of what actors ought to look like. It is not just that Wael Mandour has a pre-given notion of the way in which actors should look, which is then enacted in images. Rather, the physical production of casting videos is part and parcel of the re-creation of this notion. In other words, the video instantiates the appearance and performance of the actor to concerned crew members. Their discussions, thereby, are anchored in this kind of visual mediator, which becomes important to mediate the final film's imponderability.

In my experience with Fawzi in *Poisonous Roses*, our casting discussions concerned two core features: the actor's look on camera and his performance (*ada2*). As venerable director Daoud Abdel Sayyed once told me, 50% of the casting choice is about the actor's look on camera. Yet, actors who 'looked good' could still be deemed unfit according to Fawzi, since their performance was unconvincing (*mesh moqne3*). The

importance of being ‘convincing’ (*moqne3*) is not a rhetorical imperative to persuade the director: it is an aesthetic judgment based on the director’s own sense of what actor will ‘convince’ an imagined audience, by his mere look or performance, that he *is* the character. When Ibrahim el-Nagary was cast as Saqr in *Poisonous Roses*, the director cited the fact that he ‘looked like Saqr’, both in a literal way – i.e. in his appearance on camera – and in a ‘natural’ way – i.e. his way of carrying himself was very much like what one would expect a ‘real-life’ tanneries worker such as Saqr to look like. This statement is indicative of the implicit ideology of realism prevalent in ‘artistic’ films, which is tied to a much older genealogy of realist cinema in Egypt (see Armbrust, 1995).

Once an actor is cast and contracted, s/he goes through ‘*fitting*’ (also known as *provet malabes*, or ‘dress rehearsal’). Prior to the fitting in *Décor*, Salma Sami had a costume breakdown (verified with the costume script) and some ideas about what characters will wear in each scene. Like in scouting, the complete costume breakdown came after fitting had already begun with the stars. I have had no occasion to observe fitting in person, but I have second-hand accounts of how it unfolded in both *Décor* and *Poisonous Roses*. First, the stylist took the actor’s measurements in order to buy costume choices, while the actor brought all clothing items corresponding to the character’s needs from his/her own wardrobe. Once enough clothes were gathered, each fitting session consisted in the actress trying on costumes in several combinations and, crucially, in the stylist taking pictures of each costume combination on the actor’s body. These pictures were used by the stylist to discuss with the actor and the director the ‘look’ that befit the character, with a similar impact to casting videos on the mediation of a character’s imponderable look. This cycle of gathering clothes, taking pictures, and discussing looks went on until all costumes in the breakdown were filled – and in the star’s case, until hair and makeup were settled as well. Once all costumes and accessories (e.g. glasses,

prosthetics) were settled, the actor is considered to be ready to go on location, since acting rehearsals (*provat*, sing. *prova*) are not the norm in the Egyptian film industry – although Fawzi did run extensive rehearsals prior to the shooting of *Poisonous Roses*.

D) *Cinematography*: Once all locations were scouted and built in *Décor*, the cinematographer Tarek Hefny traced a lighting plan with his gaffer, Mahmoud Morsi, which I saw on paper a few days prior to the shooting. While Morsi was not expected to give input on the light's artistic import, he made sure that the plan was physically feasible (e.g. that there was enough space to rig specific spots in specific areas on set). The plan was drawn based on Hefny's eyeing of the Studio Misr location. As he explained after shooting, he seldom had time to draw lighting plans in every single location in *Décor*. As I have witnessed several times, then, he would instantiate his lighting in a 'pre-light' session, where he indicated to his gaffer, on location, where he wants to rig lights, and how he wants to orient the natural lighting sources (with flags, reflectors, or some such equipment). This pre-light arrangement was liable to be adjusted on the shooting day, but it was an important step in setting all lighting equipment in the cinematographer's preferred positions.

Prior to these lighting plans, Hefny ran tests on New Century's Alexa cameras with several filters and lenses in order to check how the camera would give him his expected image results. While the camera was imposed by the company in *Décor*, the cinematographer in *Poisonous Roses*, Maged Nader, had the luxury of testing different cameras before arresting his choice on a Cannon C300, which gave him a high-quality (4K) image with a 'gritty' enough texture to the film image. Camera tests in *Décor* and *Poisonous Roses* were discussed by the cinematographer and the director, and they were used to settle which camera, camera settings, lenses, and filters would be used in shooting.

These discussions bore an especial importance in *Décor*, where all lighting/coloring effects needed to be imagined in accordance with a black-and-white final image, knowing that New Century's Alexa camera would shoot raw material in color, and that the usual 'coloring' of various lights (e.g. the 'yellow' tungsten vs. 'white' neon spots) would have different effects on the greyscale of a black-and-white image. Again, the imponderability of the film's image was partially mediated by a socio-technical operation producing a visual mediator – in this case, the camera tests.

Overall, all operations in preparations can be seen to emanate, in some respect, from a scenario: scouting fills the scenario's main locations; set design/building arranges the location in accordance to the scenario's description; casting/fitting settles and dresses characters as described by the scenario; cinematography preparations settle the equipment and visual settings through which the scenario is transformed into concrete images. In its 'broken down' guise, the scenario serves as a checklist of logistical elements gathered in view of shooting (see chapter 5), in addition to being a central artifact guiding the artistic crew's work (see chapter 6). The scenario itself, however, was rarely consulted by the crew in the course of *Décor*'s or *Poisonous Roses*' preparations, except by the actors who individually rehearsed their lines, or the artistic crew members who discussed some specific aspect of the film's plot. To a large extent, then, the scenario does not *compel* the work of preparations, except by reference to specific conventions whereby some aspects of the script are seen to be relevant to some crew members as opposed to others – e.g. the list of locations to the production crew members in scouting, the list of props to the prop master in prop acquisition, or the list of characters to the stylist in fitting.

IV. Shooting

The main operation in shooting is the ‘take’ (pl. *tekat*), which is a particular image-cum-sound capture with a given camera movement and angle (*zawya*, pl. *zawaya*). All takes in a given angle constitute a ‘shot’, and all the shots taken in the same location with a similar action by actors constitute a ‘scene’ (*mashhad*, pl. *mashahed*). While the shot and the scene are the central units of artistic work in filmmaking, the take is the basic technical operation gathering all workers on set⁸².

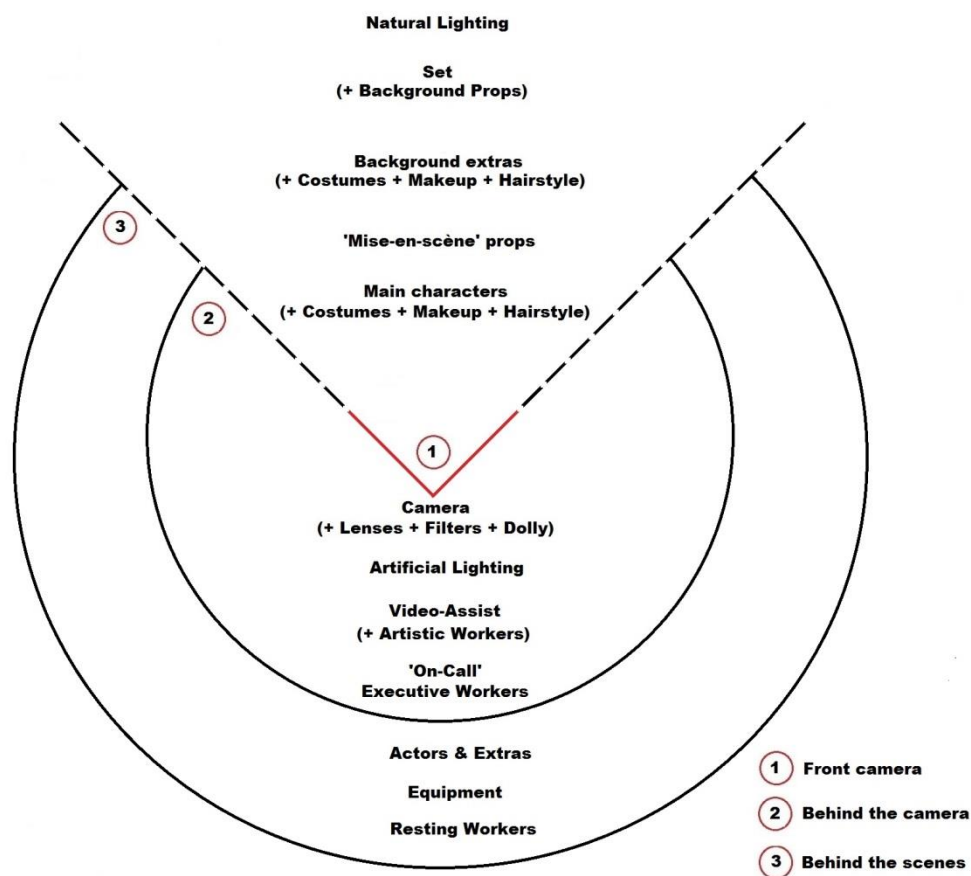


Figure 4 - The Spatial Organization of the Set

⁸² Notice that, to the actor or the stylist, changes in look coincide with changes in discontinuous scenes (since s/he will keep on the same look in continuous scenes in the scenario). To the gaffer, by contrast, changes in lighting occur in between shots, although slight adjustments to the lights' angle, intensity, or diffusion can occur in between takes. In other words, the specific unit of reckoning a shooting day varies according to one's role: it may be the 'scene' to the art direction and styling teams, but it is more likely the 'shot' to the cinematography and the direction teams (or even the 'take', when adjustments are made in between them).

Figure 4 shows the basic spatial organization of the take, which is equally important to understanding the social organization of an Egyptian set. The camera stands at the center of this three-tiered space. At its core, there is what the camera ‘sees’, as shown by the V-shape. Then, there is the area ‘behind the camera’, which is not literally behind the camera, but close enough outside the V-shaped area to maintain some crew members ‘on command’ in between takes (see chapter 5). Lastly, there is the area ‘behind the scenes’, where cast and crew members as well as heavy equipment rest outside the immediate vicinity of the take. When a take is set to be taken, the AD and the location manager will shout out ‘*Hodou2!*’ (‘Calm!’) or ‘*Nehda!*’ (‘Let’s calm down!’), in order to quiet the hustling and bustling set before sound recording. Then the AD (or, in some cases, the director) starts a roll call, which synchronizes the recording of sound and image in the take. The take ends once the director yells ‘stop’ or ‘cut’ – the sound and image recording ceases, just as on-camera action.

The basic structure of the take is not unique to the Egyptian film industry, but it is certainly characteristic of audiovisual media production as opposed to other crafts, which is why it is important to keep it in mind when reading about shooting. I will not go over what happens within the take, because I think that one’s intuition about actors performing, extras moving, props manipulated within the set, and equipment recording the whole assemblage captures the take’s technical goal: to take a snippet of audiovisual material, thereby materializing a particular shot (in the director’s shooting script) in a particular scene (in the scenario). This audiovisual material constitutes the very matter of postproduction work. It is akin to a distilled extract produced, drop-by-drop, through the alembic of shooting. What happens in the take, its content, is central to the film’s look. As such, it is the object of extensive discussions among artistic workers on set. That said, since I am not interested in a content analysis extending the workers’ own, and given my

announced commitment to examining the production process and the labor invested in it, I will focus on what happens *around* takes in what follows.

A) Furnishing and lighting: In a sense, what happens prior to a take extends into preparations, where every single element in the take is supposed to be gathered: the camera movement is drawn out in the shooting script; the actor is cast and fitted with a given look; the set is designed and built; the camera equipment is tested and the lighting planned. These elements can be decided well in advance of shooting, but artistic changes are always liable to happen on the shooting day, without mentioning ‘*drops*’, a word used by Egyptian filmmakers to designate logistical mistakes occasioning major delays in shooting (see a more extensive discussion on ‘*drops*’ in section III of chapter 5). Barring any ‘drop’ or artistic change, the serially recorded takes in *Décor* and *Poisonous Roses* followed the AD’s call sheet (*order*), which sets the order of scenes and (when the shooting script is known in advance) the order of shots within each scene. On a day-to-day level, the first operation on set is furnishing (*farsh*), and it is repeated with every scene change⁸³. On every shooting day in a new location in *Décor*, I would see the art direction team guiding the prop master Seyaha and his crew in positioning the *mise-en-scène* props in the next scene, either by executing the arrangements prepared in Nihal Farouk’s floor plan or by adjusting them on location. Such adjustments can come on the director’s initiative. In *Poisonous Roses*, Fawzi would sometimes ask the art director Omar Abdel Wahab to move furniture items around. While shooting in Saqr’s apartment, for instance, he asked him to remove a white lamp from Saqr’s room because it did not look ‘realistic’ in a working-

⁸³ Although furnishing seems to involve the mere displacement of objects in space (a menial job reserved to prop assistants), these displacements are constrained by the V-shaped organization of space around the camera, where props visible in one scene need to remain in ‘continuity’ (*rakor*) within the same scene, even when camera angles change with every shot (thereby driving the whole set to reorganize in the three-tiered shape outlined in figure 4). The imperative to maintain continuity is a deeply ingrained convention in Egypt as in many commercial film industries.

class setting. This claim was disputed by Abdel Wahab, but he nevertheless yielded to the director's artistic authority.

After furnishing the set, the cinematographer takes the space to set his lights (*eda2a*). There was a pre-light setting in all interior locations in *Décor* and *Poisonous Roses*. However, Tarek Hefny and Maged Nader would bring several adjustments to the lighting according to the particular position of the sun or, more likely, according to the director's indications on camera movement. Even when there was a written or visual mediator acting as a shooting script, Abdalla and Fawzi would explain – in space, before every single shot – how they wanted to set the camera and move it. Hefny and Nader, in turn, made suggestions to amend the director's view according to their own aesthetic sense and their physical ability to execute the movement in question, seeing as they were the cameramen as well. Once the cinematographer reached an agreement with the director, he would give indications to his lighting crew on where to rig the spots and which gels to add on them; he would instruct his focus puller on filters and lens changes; and in cases where camera motions are needed, he would tell the gripping crew where the camera will move.

These indications are 'technically' necessary to arrange the space of the take in a way that avoids showing cinematic contraptions on camera (given the imperative of continuity). Moreover, they are imbricated with an aesthetic specific to each cinematographer. In *Poisonous Roses*, for instance, Nader would ask his gaffer Sanad to add soft filler lights to kill the shadows over the actors' face in night-time shooting. While he might have asked to get a hard light or even avoid any lighting to create a 'noir' feeling, Nader's choice of soft fillers, in this context, is both a matter of personal taste – in a desire to create a 'realistic' lighting environment – and a matter of distinction from surcharged lighting practices in 'commercial' Egyptian cinema. All these notions are embedded in the cinematographer's instructions over the physical arrangement of lighting on set. Although

they are not openly communicated as such, they are enacted in a tacit technical understanding between him and his crew. This understanding, in turn, is made visible by the play of light captured in the take, even though the work invested in lighting may seem evanescent to the viewer.

B) Rehearsals and performance: While the set is furnished and lit, actors are readied behind the scenes. They are dressed and styled according to the prepared ‘look’. In *Décor*, the director Ahmad Abdalla would sometimes take this time to review the actor’s performance in an upcoming scene. Likewise, the movement script, Jaylan Auf, would sometimes try to catch the actor in order to review their dialogue. Again, the socio-technical work invested in preparing the actor is embedded in individual aesthetic concerns – e.g. the star’s sense of whether s/he looks ‘beautiful on camera’ or not; the director’s and the stylist’s sense of whether the dress is ‘in character’ or not. These considerations can create artistic clashes on set. In *Poisonous Roses*, while shooting a key scene where Nahed, Saqr’s bourgeois girlfriend, would come knocking at his door, the actress Rémie Akl came out to meet Fawzi behind the camera once the previous shot was done. When he saw the costume chosen by the stylist Lina Aly, a fitting shiny black top with a slim pair of jeans and converse shoes, Fawzi strongly objected to it on the grounds that the actress looked like a teenager. Aly answered that these were the only items in her wardrobe with the colors that match the color scheme designed by the art director Omar Abdel Wahab, and Fawzi protested until he took the scene a few times to avoid the sunlight going away. Still, he kept repeating that he would discard these shots in postproduction if a new costume is

not to be found. As it turns out, this whole scene was deleted when he rewrote the scenario in the summer of 2015⁸⁴.

Once actors were ready and brought on set in *Décor* and in *Poisonous Roses*, there were rehearsals to test the ‘mechanics’ of the actor’s action in the take (including his dialogue lines and his main movement) or to test camera movement (with its composition, its speed, and its duration). Rehearsals were recorded by the video-assist operator to be reviewed in playback by the artistic crew. In *Décor*, these reviews were instrumental in adjusting the image’s composition by displacing some props, or adjusting the camera’s frame and its movement, or the actor’s performance (*ada2*). It is worth noting that the use of the Arabic notion of *ada2* is specific to the way in which acting is conceived in the Egyptian film industry. ‘Performance’, here, is in contradistinction with ‘mechanical’ aspects of the actor’s position and movement: it most notably centers on the actor’s facial expressions and his ability to communicate emotion (*e7sas*). Knowing that the term ‘*ada2*’ is commonly used to gauge someone’s skillful performance in a particular task – e.g. a footballer’s *ada2* in a given game – it is interesting to note that those aspects isolated to gauge the actor’s skill are isolated from his/her bodily presence on camera. Moreover, this isolation explains the difference between the rehearsal, a mechanical activity, and the emotional performance. In a common representation, as young actress Maryhan Magdy would say in the preparations of *Poisonous Roses*, this emotion can only come out once, on camera, no matter how many times it is rehearsed.

⁸⁴ Such concerns and disagreements are compounded by more practical obstacles to convincing actors that a particular look is necessary in a given scene. For example, in line with what Hoek remarks in Dhaka (2014: 91-127), Egyptian actresses are very careful about what they reveal of their bodies. This is not so much because of censorship regulations, but more so to position themselves within the industry’s hierarchy of respectability as ‘serious’ actresses, and to try to negotiate artistic control over their characters vis-à-vis the stylist and the director.

Once rehearsals are over, the roll call ensues. After the take, adjustments are made to image composition, camera movement, and actor performance following sometimes extensive conversations among artistic crew members. The take is repeated with its camera angles, lenses, movements, lighting, and action (although it may involve slight adjustments in one or another element) until the director (and, secondarily, the cinematographer and the sound engineer) is entirely satisfied with the audiovisual material distilled in the shot. The camera is thereafter displaced for the next shot, with a new angle/movement. The entire cycle of furnishing, rigging lights, setting tracks or tripods, changing lenses, changing costume/hairstyle/makeup starts over again, in line with what was set for the next ‘scene’ or ‘shot’ in the call sheet (subject, again, to ‘drops’ or artistic changes). If everything goes to plan, the cycle of operations in between takes leads to the recording of all the material set by the call sheet on a given day and, ultimately, all the material needed in postproduction. In *Décor*, this recorded audiovisual material was copied every day on a laptop by the edit-camera worker Yasser Zanita. It was backed up on a hard drive and sent to the editing office, accompanied by a list of all takes on a given shooting day in the clapper’s daily report (*rabor*). This set of written/visual mediators – i.e. the audiovisual material with its accompanying report – is the thin link between all the work so far invested into ‘the film’ and the work of postproduction.

V. Postproduction

A) *Image postproduction*: Much like in Hollywood (Wasko, 2003: 50-51), Egyptian postproduction starts with image editing (*montaj*) while shooting is ongoing. In *Décor*, the daily yield of audiovisual material would be backed up on two additional hard drives,

converted into a workable format, and synchronized by the assistant editor in New Century's office. Using the treated image material, the editor Sara Abdalla started 'building' scenes (*tarkib mashahed*), which involved selecting takes (*e5tiar tekāt*) and sequencing these takes in the order prescribed by the scenario. Once shooting was over and all the material 'built' (*metrakkeb*), Sara and Ahmad Abdalla started working on this cut until they reached a 'final cut'. Working between both cuts is an iterative repetition of previous operations, much like in screenwriting – it involves an indefinite re-selection of takes and re-building of scenes in editing software⁸⁵. When the 'final cut' was ready, the scenes requiring video effects were sent to the graphics supervisor and, later, the entire cut was sent to the colorist⁸⁶. This technical sequence – going from a 'final cut' with a time-code, to video graphics inserted in the cut, to color applied to the whole 'cut-cum-graphics' image material – can be thwarted in practice, which means that it has to be reiterated when, to take a hypothetical instance, a default in graphics is discovered while coloring.

While I have not been brought to observe how editors work with directors in close detail, all my interlocutors have described it as a dialogic interaction, where the editor is

⁸⁵ As the well-known editor Mona Rabie insists, digital technologies have not made the work of editing 'faster', since analog editing could generate a film within a similar timeframe (assuming that editors were trained to perform this labor optimally). That said, digital technologies made it possible (time-wise and cost-wise) to try more combinations of takes and scenes than the analog process. A similar observation can be extended to coloring, graphics, sound-editing, musical composition, and sound mixing, although the time allotted to most of these 'merely technical' operations is very narrow in comparison to image editing.

⁸⁶ When the 'final cut' is ready, it is conformed (i.e. the editing decisions made on the lower-quality working image are mapped onto the higher-quality raw material) and sent to the colorist in twenty-minute chapters, while the specific scenes needing video graphics are sent to the graphics supervisor. Contrary to editing, coloring and graphics were described to me as 'purely technical' operations. Whereas the editor can argue with a director for weeks over a particular take or scene, the colorist and the graphic designer are under much stricter time pressure by the production company. This is because every coloring/graphics session is very costly, and companies are keen to catch up with seasonal deadlines in cinema releases, so they factor very little time to work through coloring and graphics in postproduction. According to the well-known colorist Mahmoud el-Touny, this pressures the colorist into matching color values across the whole film without discriminating between particular intensities in particular scenes, which means that his work is reduced to applying settings and exporting the material with the cinematographer's approval (a 'merely technical' endeavor). With more time, says el-Touny, he would have several sessions with a cinematographer to argue over which colors are better in what scenes, and which color moods communicate particular meanings, much like the editor and the director.

constantly arguing with the director. They argue over which takes to select; which camera angles are ‘better’ in terms of the image’s quality, the camera’s ‘smooth’ movement, or the actor’s ‘convincing’ performance; which scenes need to be scrapped; and so on. The editor and the director work alone, except when they show more or less shaped ‘cuts’ to trusted parties, who serve as the film’s first audience. In *Décor*, I was privileged enough to watch one cut (which was neither the first nor the final one), and I gave my opinion about the fast-paced rhythm in the opening photomontage as well as some dragged-out stretches of dialogue in ‘emotional’ scenes. These reactions were dutifully noted by Sara Abdalla in her comment notebook, a written mediator which I have seen many editors use in order to note all changes to the cut demanded by the director. I know that Yousry Nasrallah (a well-known director) and Mona Rabie (a well-known editor) also watched *Décor*’s cut at various stages. Badawy (general manager) and Jennifer Peterson (assistant manager) gave their opinion on the final cut: both disagreed with the inclusion of the movie theatre scene at the very end, where the camera reveals that the whole story had been a movie watched by the very actors/characters in *Décor* all along. Still, Ahmad Abdalla remained firm on his decision to include the scene, and his will was respected.

B) Sound postproduction: Since the sound editor is the sound engineer on set, and since the sound editing operation relies on the audiovisual synchronization of the assistant editor on every shooting day, sound editing (*montaj sot*) occurs after the whole shooting is complete in Egypt. The operation starts with cleaning (*tandif*), which involves cutting away all ‘noise’ in the dialogue and sound effect tracks. According to Ahmad Saleh, the sound editor and sound engineer in *Décor*, the editor’s main concern is to make the soundtrack sound as ‘natural’ (*tabi3i*) as possible, in the sense that the spectator’s attention ought not to be taken away by the sound (e.g. a suddenly loud sound effect) or by its

absence (e.g. an unrecorded word in the dialogue). This concern is linked to the widespread convention of continuity editing. The film image has to give the impression of a continuous flow of events, and the sound should support this impression. As the experienced mixer Mohammed Fawzi put it, were the sound to stand out, the imagined spectator's attention would be drawn away from the story (*qessa*), which is really what matters to him (see chapter 7). To make sure that this kind of distraction cannot occur, all sound editing is done with a '*reference*' image-edit. This image is not the conformed raw material, but a workable image giving a 'good idea' about the final film's image: it is a visual mediator accompanying the sound editor's work, which helps him to estimate whether the sound/image alliance sounds/looks 'natural'.

Once cleaning is over, the sound editor can start dubbing (*doublaj*) with the talking actors and the director⁸⁷. Given the costs associated with dubbing studios and the digital sound editor's ability to mitigate many 'noises' in sound material, dubbing on an extensive scale is not prevalent in today's industry. Unlike in Bollywood and Dhallywood, where dubbing is the norm given the noise made by analog cameras (Ganti, 2012: 227-229; Hoek, 2014: 65), contemporary Egyptian movies only resort to dubbing when it comes to correcting 'mistakes' in an actor's performance or in sound recording (e.g. when a dialogue line has been unclearly recorded). In *Décor*, to give a concrete example, Horeya Farghaly's voice was a little high-pitched and nasal in on-set recording, and Ahmad Saleh saw a mismatch between this voice and some scenes' emotionality. Therefore, he called for its dubbing even while cleaning the soundtrack. Once the dubbed lines were recorded, they were incorporated by the sound editor in his sound-edit. Once the edit is done, it is traditionally sent back to the editor to double-check on technical details (e.g. whether the

⁸⁷ While most sound editing work can take place in a home studio with current software technology (the most prominent one among Egyptian sound engineers being Apple Pro Tools), dubbing requires the better equipped studio environments in postproduction companies, since the actor needs a clear view on his original performance on screen in order to mimic a (new) on-screen voice.

synchronization still works, whether all dialogues are clearly audible). In this sense, the Egyptian editor is endowed with a role normally reserved to the ‘technical director’ in Euro-American industries: s/he supervises the technical quality of the film product, starting with the audiovisual material in shooting until the film’s printing.

C) *Mixing*: Once checked, the final image-edit (after graphics and coloring), the sound-edit, and the musical soundtrack (*el-musiqa el-taswiriyya*) are sent to the mixer. Mixing (*mixaj*) involves the final assemblage of the ‘final cut’ with all recorded soundtracks, including the dialogue, the sound effects, the music, and the *foley* (i.e. the non-discrete sounds made by the movement of bodies and objects on screen, like the friction of clothes or the squeaking of chairs). Time permitting, the mixer engages in a similar iterative process to the image and sound editor, whereby he matches certain rises and falls in dialogue, diegetic sound, and extradiegetic music according to his (and the director’s) idea of image/sound balance⁸⁸. In my interview with composer Hani Adel, he insisted that this timing is crucial. Superimposing music on image is easy enough, he said, but what is difficult is to synchronize both tracks in a way which will elicit the spectator’s emotion (*e7sas*). Cueing a violin on an emotional scene, after all, is different from cueing it to a close-up on a tear running down the actor’s cheek.

To give another example, the young mixer Abdelrahman ‘Mana’ Mahmoud showed me a sequence in his movie *Villa 69* (dir. Ayten Amin, 2013), where the prominent director Khairy Beshara had a cameo as a jogger near the protagonist’s villa. Given that it was a moving medium shot, the boom microphone on set was too far to

⁸⁸ I have never observed a mixing session in action, but as I mention in chapter 2, Egyptian mixers tend to work with one or two assistants. In consequence, they can only record a portion of all sound effects and foley in studio, while frequently getting the effects that they need (e.g. sudden car breaks, bullets, footsteps...) from pre-recorded sound libraries. This situation is precisely why some directors like Ahmad Fawzi Saleh or Hala Lotfy insist on recording additional sounds on set, to give the distinctive ‘Egyptian’ feel to the sound which is lacking in libraries with ‘non-Egyptian’ sounds. The technicalities of sound, here, meet a clear vision about the ‘authenticity’ (*asala*) expected by both directors in their movies.

record Beshara's actual bodily noise. Mana therefore showed me the original shot, without added effects or foley. He then showed me the same shot with added breathing noises and loud footsteps. The overall effect of the scene was completely changed. As Mana and I felt, the impact of Beshara's bodily exertion was not palpable in the original material, as though he were seamlessly moving through the frame, while this exertion was made clear by the mixer's additions. Such decisions cement the idea that the 'technical' work of the mixer, like the work of all 'non-artistic' workers, has important aesthetic consequences over the film product. These consequences are made evident, in the course of production, through the mediating writings and images manipulated by each worker, whether it is the scouting pictures produced by production crew members, which establishes an implicit 'pre-selection' of shooting locations in the film, or the image-edit '*reference*' used by Mana to anticipate the audience's reaction to an uncannily noiseless jogger. In each case, certain writings and images are invested with a mediating capacity between the present and the future of the operational sequence of filmmaking.

Once the mixer and the director agree on a final film version, the mix is conformed to the raw image and sound material. At long last, 'the film' emerges. Still, it is 'the film' only to the director, the editor, and the mixer until it is printed, distributed, and exhibited. Until the final film is printed, indeed, there remains an unfinished quality to the postproduction stage. The editor will still have a note that she has not taken into account; the cinematographer will want to modify a color that he did not want in a particular scene; the mixer will leave a noise that he would have wanted to remove. Thus, the work of postproduction workers and their discussants can only reach a *de facto* resolution once 'the film' is printed. As I explained in chapter 1, most domestic theatres were still equipped with 35mm projection equipment by 2014, which means that the digital mix needs to be

converted into a printable format and sent to Studio Misr, the Egyptian Media Production City, or Aroma, the only facilities with direct-to-print technology (through which digital material can be printed in 35mm format). While printing is conceived as a fairly automatic operation, it is a very costly one, which is why producers ration printed copies. It is also liable to several technical failures. In a 2014 New Century movie, to take a recent example, printing had to start over again when it was discovered (after a few copies were printed) that the machine had desynchronized the image and the sound.

VI. Ways of Making Films

When I initially set out to study commercial film production in Egypt, I had barely any doubt about the kind of product that I was interested in: I had seen a copious amount of Egyptian movies, in different periods and different genres, and all shared a common enough format to warrant a study of the way in which these movies were made. When I started following *Décor*, I was struck by the diversity of operations which were made invisible in the movie; by the way in which these operations had contingent effects on what *Décor* would eventually look like; and how the very notion of ‘the film’ looked distant when one is still simply reading a scenario or shooting a few disconnected takes. Pushing this impression to an extreme, one might say that there is nothing distinctively ‘film-like’ in film production, since the product of the entire process may as well be a television drama, a commercial, or a documentary. Evidently, the artistic workers with whom I worked had never any doubt that they were making a film, but given the instability of the film-in-the-making, their confidence spurred an elementary question to my mind: what is a film?

Although the contents of a feature film vary indefinitely (in terms of actors, costumes, props, backgrounds, lighting...), there is a sense in which a film must have a certain length (normally between 90 and 180 minutes) with a certain audiovisual quality (as determined by the shooting equipment and projection format) and, most importantly, a fictional story (*qessa*). These criteria are not meant to be exhaustive or exclusive, yet there is a sense in which any audiovisual product corresponding to these three criteria is ‘a film’. Thus, editors working on a given cut would say that it is ‘too long’ or ‘too short’. This could mean that the cut gives a languid or jumpy impression to the viewer, yet it could also mean that the cut is, literally, too long or too short to be released in its current format. Indeed, the film’s length is constrained by the producer, who is pressured by distributors to make a movie that is neither too short (e.g. below 90 minutes) nor too long (e.g. beyond 180 minutes). The film’s final length is conventionally settled by parameters which are not tied to the project’s artistic dynamic, but clearly constrained by the industry’s commercial nature. There is no reason, indeed, why a given cut would ever be physically too short or too long, yet these evaluations are made (and enforced by the producer) based on a widely unexamined convention, with direct consequences over the film’s length. Furthermore, the conventional ‘*quality*’ expected in a feature-length movie is an important aspect of what defines it as ‘a film’. In productions with sufficient budgets, the systematic use of Red Epic or Alexa cameras as well as the use of high-end software in editing, coloring, and mixing ensures this quality. In a personal interview with the colorist David Maher, he heavily criticized this association between expensive equipment and quality. He argued that choosing the right equipment to shoot the movie is not a matter of ingrained habit, but of the objectives targeted by artistic workers, which may be better served by less expensive equipment. Maher’s opposition to these conventions highlights how, even though an

artistic worker may ask for a ‘lesser’ piece of equipment, the production team will insist on using conventionally ‘better’ equipment to guarantee a minimal quality to the film.

All these conventions are made evident by the way in which some films are deemed ‘lacking’ according to these criteria. To take one example, the young director Nadine Khan confided that her first feature-length movie, *Harag w-Marag (Chaos and Disorder, 2012)*, was criticized as ‘not being a movie’ in Egypt because it was only 70 minutes long. Similarly, one regularly hears that Sobky movies are ‘not movies’ because their audiovisual quality (and, according to some interlocutors, their storyline) is lacking. Despite these opinions, there is a sense in which both Nadine Khan’s and Sobky movies are still ‘films’ given that they have fictional storylines, as well as a reasonable length and quality in comparison with significantly different audiovisual products like TV serial dramas and commercials. While there is *a posteriori* contestation concerning the filmic status of a theatrically released product, as in Nadine Khan’s or Sobky’s case, there was never any doubt that we were making ‘a film’ according to the above conventions in all the projects to which I have participated. This idea was so entrenched, in fact, that it seemed like only an anthropologist with exotic views could posit that these unexamined conventions were, precisely, conventional, and that there is nothing in the nature of film work that *necessarily* involves the making of a product with a particular length, quality, or storyline. These conventions are evidently not fictitious, but there is no relation of necessity between the socio-technical work of Egyptian film production and the ‘film-like’ quality of its products, which is set by convention.

When I started fieldwork, I would ask my interlocutors whether there was a ‘way’ of making films in Egypt (*tari2et sina3at el-sinema fi-Masr*). Although ambiguous, my question generated two general types of answers: some insisted that there was a very clear ‘system’ in the Egyptian film industry (*sina3a*), while others insisted that there were

several ways to make movies in Egypt (*kaza tari2a fi sina3et el-aflam*). The central distinction, here, is between two meanings of the term ‘industry’ (*sina3a*). To the former group, it is a *de facto* entity with a political economy as described in chapter 1. To the latter, it is an imponderable process of production, which can take several directions as described in chapters 5 to 7. This distinction is interesting in its own right, but the way in which it was articulated highlights an even more important notion: that there is a great disparity in the way in which each individual grasps the ‘way’ of making films. This is not to say that I, the anthropologist, know more about this way than my interlocutors, or that there is such a unique (or uniquely Egyptian) way to begin with. It is to say, however, that I am struggling just as much as my variously positioned interlocutors to get a grasp on the industry’s workings.

Lower-end crew members and novices do not have the same contact that I have had with all aspects of production. This partly explains why, for instance, I would explain some aspects of film production to the second assistant director Renad Tarek, even though she was the one employed on set. Numerous additional factors, however, can make one novice more knowledgeable about these aspects than another – e.g. formal training, personal experience, family contacts, none of which Tarek had so far as I could ascertain. As Farghalli would frequently say, one just needs to be curious and constantly seek to learn more about the making of films in order to ‘advance’ in the industry, both in terms of career development and general learning. I agree with Farghalli’s overall sentiment, since I feel that I undertook a similar apprenticeship on my way to grappling with film production in Egypt, but I would still qualify his statement in two ways. First, what counts as valuable information varies according to one’s position in the division of labor. Thus, while Farghalli (as an individual) may know a lot about the industry in general, he may not be interested (as a line producer) to learn about screenwriting or mixing – two crafts with no

direct relation to his own work. As the mixer Mohammed Fawzi confidently put it, all production crew members in Egypt (including Farghalli, in my estimation) have little to no idea about the intricacies of postproduction. In Fawzi's view, this leads to several misunderstandings over the time and work necessary to do postproduction on a given project. As I explore in chapter 7, the fact that many operations are understood as being 'purely technical' leads some crew members to ignore the human effort expended in their execution.

The second obstacle to learning about the process of film production is not just ignorance or lack of interest, as Farghalli seems to imply, but an active resistance to the transmission of knowledge. This resistance is felt, in part, in the master's unwillingness to communicate the 'secrets of the trade' to the apprentice, as I have regularly heard in an industry marked by master-to-apprentice modes of enskilling. In this respect, I am grateful to Farghalli for having answered all my queries as transparently as I think is possible, yet I was surprised to hear one of his assistants jokingly saying, once, that Farghalli should not tell me too much or else I would steal his job. In a similar vein, when I started working as an assistant to the director in *Poisonous Roses*, Omar el-Zohairy joked that I should pay him, because he taught me everything about the job while I was observing his work in *Décor*. This association between knowledge of the production process and professional advancement indicates that my interest (as an anthropologist) in film production was not always conceived as an innocent one. I was often asked, indeed, whether or not I would work in the film industry once I was done with my doctorate, and some regular interlocutors assumed that I really just wanted to become a director. To be sure, working on *Poisonous Roses* somewhat confirmed their intuition, but what drove my curiosity was the use of technological devices in the industry, to which I turn in the next chapter.

All in all, it is not necessary to hold a concrete picture of the entire filmmaking process in mind to work on a film project. Simply, one remains aware that, here and now, some eventual operations specific to one's position will have to serially unfold in order for 'the film' to be made. In line with French scholars in the anthropology of technology, I would argue that the 'social representations' generated by this process cannot be understood in isolation, as though they existed over and above the physically efficient operations executed in each stage. Rather, as I have detailed throughout this chapter, each technical operation anticipates subsequent ones through the production of written and visual mediators, the concrete presence of which participates in the social agent's apprehension of the film's progression. This insight is crucial to this thesis' overarching argument. The very concept of an 'imponderable problem' is based on the filmmaker's situation between his current activity and his expectations concerning the eventual operational sequence in which s/he is engaged. Mediating imponderable problems in commercial film production, therefore, is about closing the gap between the ideal-typical sequence of technical actions presented in figure 3 and the everyday contingencies subverting its unfolding, as I will detail in chapters 5 to 7. In order to understand how mediation between present and future works in this setting, one needs to pay heed *both* to the teleological character of filmmaking *and* to its daily practice.

Chapter 4

The Use of Technological Objects

I. Objects and Reserves

In previous chapters, I have described the Egyptian film industry's interpersonal organization (chapter 1), its division of labor (chapter 2), and its socio-technical process of production (chapter 3). Given my initial commitment to examining the way in which technological objects are used in everyday filmmaking activities, this thesis has so far given a faint impression of them, except in brief references to the turn towards digital cinema in the late 2000s, and the written/visual mediators inscribed on paper, phones, computers, and some such personal devices. In what ways, then, are these objects physically involved in Egyptian film production? The issue at stake, here, is whether it is possible to describe filmmaking as an abstractly 'socio-technical' phenomenon without examining the actual devices through which this phenomenon is enacted. I have partly hinted at this issue in chapter 3, where I argued that technical actions are invested, in their very efficient execution, with an orientation towards the future of a socio-technical process giving meaning to individual and immediate working practices. I hope to have sufficiently evidenced this claim, by highlighting how each operation in filmmaking leads onto subsequent ones thanks to written/visual mediators like the scenario, the scouting picture, the video-assist monitor, and the mixer's image '*reference*'.

This chapter will offer a more detailed description of the way in which various technological objects are physically present in the Egyptian film industry. In section II, I will examine the emic conception of technology in Cairo, which serves as useful

background to the description of ‘commodity-objects’ in section III. What I call an object is, in a narrow sense, a physical entity no matter its use. It corresponds to the Egyptian worker’s ordinary concept of a smartphone, a laptop, or a spotlight as ‘things’ (*ashya2*, sing. *shei2*; or *7agat*, sing. *7aga*). This notion is a consequence of ‘the progressive disembedding or “cutting out” of the technical from the social (...) that lies behind the institutionalized separation between technology and society that is such a pronounced feature of modernity’ (Ingold, 1997: 129-130). This disembedding, this ‘purification’ to use Latour’s term (1993), establishes a clear-cut separation between physical objects and physical subjects, where the latter are set in inexorable progressive motion by the former. This point will be made evident in my description of the Egyptian category of *teknologia* in section II – an Arabized cognate of the Greek-origin word used to designate ‘technology’ in European languages.

While connoting a deterministic drive towards societal progress, the term *teknologia* has come to denote digital technologies in contemporary Egypt. These technological objects are made present as ‘commodity-objects’ to my Cairene interlocutors. In line with a social science tradition extending to Veblen (1899) and Bourdieu (1986) before Miller (1987), I will suggest in section III that the consumption of digital technologies is a way of showcasing one’s status – both in terms of the Egyptian film industry’s hierarchy and the wider society’s class structure. While nonhuman, then, these objects are not asocial. As Miller convincingly argued (1987), material culture is always entangled in a wider web of social relations: in today’s Egypt, it is inevitably entangled with mass commoditization and mass consumption. Indeed, just like smartphones or laptops are conceived as technological objects, their proximate origin is conceived as a more or less concrete market – e.g. the local tech store, the local bookstore, Amazon.com – without attention to these commodities’ biography – e.g. in a Silicon

Valley R&D room, in Indonesian factories, or in an Egyptian port. Since personal technologies are conceived as commodity-objects by my interlocutors, their concrete use rarely comes under reflexive scrutiny. This is in fulfillment of Bolter and Grusin's remark that 'our culture wants both to multiply its media and to erase all traces of mediation: ideally, it wants to erase its media in the very act of multiplying them' (2000: 5). In consequence, to use the metaphor of a blind man's stick proposed by Malafouris, the technological object 'becomes, through time and practice, incorporated and thus transparent. It is itself forgotten.' (2013: 7)

There is a discrepancy, however, between what people say about commodity-objects and how they are *used* in everyday practice, especially in a socio-technical production process such as filmmaking. Borrowing from Heidegger (1977), section IV describes what I call technological 'reserves' in order to engage with 'objects' as they are used in the everyday activity of film production. The reserve, in short, is an object that makes constant demands on the worker's attention to expend his efforts on a situated, future-oriented end. The reserve is not, as in the Marxist expression of a 'reserve army of labor', a potential substitute to the real object. It is rather like a stock of energy, a resource, ready to be marshaled at any moment. To take a concrete example, I have seen the production assistant in *Décor*, Mahmoud Abdallah, using his Samsung smartphone in multiple ways. He would visit his Facebook page, play the popular Facebook game Candy Crush, take personal pictures, send text messages, and make phone calls to various people, at work and at home. Yet, when he was sent by the line producer Farghalli to accomplish a scouting mission, Abdallah's smartphone became a 'picture-reserve', channeling his efforts towards the production of a specific set of visual mediators in the socio-technical process of *Décor*'s production. Thus, the object and the reserve are not strictly speaking two different things, but two different moments in the apprehension of things. At one

moment, Abdallah considers his smartphone as a multifunctional object with a set of inert technical specifications. At another moment, it becomes a resource that compels him to take scouting pictures⁸⁹.

The description in section IV centers on my experience in Egyptian film production, but I do not expect to highlight a specifically Egyptian way of using technological objects. Rather, I wish to show the way in which these ‘objects’, in their immediate use, compel the filmmaker’s attention to specific (future-oriented) tasks within a long-term production process. On a theoretical level, then, the distinction between objects and reserves is meant to move beyond consumption-centered approaches (see Appadurai, 1986; Miller, 1987), which examine how objects are embedded in synchronic social relations without examining how, in some circumstances, these objects come to mediate between the present and the future of a production process. This examination is crucial to the ways in which Egyptian filmmakers engage with the various imponderable problems associated with their activity. In section V, then, I situate my overall description beyond the abstract phenomenological present; beyond the mere presence of technological objects and their immediate use. Anticipating my core argument in chapters 5 to 7, I argue here that technological objects can transport the filmmaker’s thinking into ‘incoming futures’ where immediate actions are thought in conjunction with near-future/far-future outcomes.

⁸⁹ On a phenomenological level, the distinction between object and reserve is well illustrated by Heidegger’s contrast between ‘presence-at-hand’ (*Vorhandenheit*) and ‘readiness-to-hand’ (*Zuhandenheit*) (2001: 98-102). Much like the commodity-object in section III, the ‘present-at-hand’ object is conceived as being distinct from a Cartesian subject. The ‘ready-to-hand’ reserve, by contrast, is phenomenally indistinguishable from an acting body. It becomes something-used-by-someone, a nonhuman partner in a common action. Heidegger’s classical example involves a hammer, which is inertly present-at-hand to the onlooker, yet is ready-to-hand once it is used to hammer nails into a plank. The carpenter cannot think at every moment about the objective hammer and his subjective hammering: the hammer is an object-in-use, much like the carpenter is a subject-in-action, each entity having a specific weight (literally and metaphorically) in the overall hammering. Similarly, the keyboard on my laptop becomes ready-to-hand once I start typing, since I do not think about every single objective key that I hammer. When my action is interrupted, however, I become again aware of the keyboard’s presence-at-hand.

II. On *Teknologia*

The technological objects used in today's Egyptian film industry correspond to the local category of *teknologia* or *el-teknologi*. On a denotative level, the category designates digital technologies like mobile phones (including smartphones), personal computers (including laptops and tablets), LCD screens, digital cameras (including cinema cameras), storage units (including USBs, hard drives, SD cards), and attending digital accessories (including Wi-Fi routers, Internet cables, USB cables). *Teknologia* has become a distinctively digital term⁹⁰, contrasting with 'pre-digital' objects like paper, analog electronics, and heavy machinery. The digital technologies denoted by the term are locally associated with abstract notions of modernity (*ʔadasa*) and progress (*taqaddom*). In this regard, *teknologia* becomes a general category that connotes a 'unilinear progression from simple tools to complex machines', which is one of the major assumptions made by the 'standard [Western] view of technology' according to Pfaffenberger (1992: 507).

I will come back to the digital objects denoted by the term *teknologia* in section III. But first, I wish to offer three vignettes to illustrate the term's wider connotations in contemporary Cairo. The first vignette culminated in a remark made at the first conference organized by the Supreme Council of Culture after the 2011 revolution, in October 2013, titled 'Egypt's Culture in Confrontation' (*Thaqafat Masr fil-Muwagaha*). It was, as I was told by a journalist friend, a customary exercise in getting intellectuals to recommend changes to the Ministry of Culture's administration. The conference's overtly post-

⁹⁰ An extensive search in both monolingual and bilingual Arabic dictionaries cannot ascertain the existence of the word *teknologia* before the 1970s, although one might guess that the word would have been in everyday use earlier on. According to a search in the online database *Sakhr*, which compiles literary magazines across the Arab world since the early 20th century, the earliest incidences of the term *teknologia* were in 1960s articles on the modernization of the emerging postcolonial nation-states in the region. This would explain, in part, the wider connotations associated with the term today, although *teknologia* now designates *digital* technologies in particular.

revolutionary rhetoric did nothing to convince my skeptical interlocutor about its political efficacy, since he thought that the conference was an umpteenth attempt to reinstate ‘serious’ culture (*thaqafa bgad*) in a Ministry run by bureaucrats uninterested in art or culture. I cannot say much about the conflicting discourses emerging on-stage/off-stage at this kind of conference (for a fuller treatment of these kinds of cultural debates in Cairene intellectual circles, see Winegar, 2006; Mehrez, 2010). Still, I was struck by a particular remark made in the closing session where ‘recommendations’ made to the Ministry were read out in a crowded press conference. Various speakers intervened in support of the recommendations, including the well-known writer Bahaa Taher, the director Magdy Ahmad Ali, and the publisher Mohammed Hashem, but what caught my attention was a comment made by a certain Mohammed Awad, a young man who was invited to speak as a demographic representative of ‘the Egyptian youth’. This was a tantalizing task when one knows that a large part of the post-revolutionary public targeted by the conference was, at least rhetorically, the ‘youth of the Revolution’ (*shabab el-sawra*).

Awad said that ‘the youth’ feel like they are going ‘so much faster’ than their elders because they live in an era of *teknologia*, implying that they need political change in the Ministry to match their quicker pace. This remark seemed to be barely noticed in the audience or among speakers in closing, yet the very fact that it was unremarkable struck me, at the time, because the substance of Awad’s argument crystallizes several assumptions about the power of *teknologia* in Egyptian society. Awad’s remark implied, first, that there is a generational divide between the tech-savvy ‘youth’ and the unsavvy ‘elders’; second, that this divide is alienating to the youth because they ‘go faster’; and lastly, that they ‘go faster’ because technology is advancing fast as well, and that only the youth are in tune with this pace as opposed to their elders. This stands as a clear expression of mutually articulated, technologically deterministic assumptions: *teknologia* is a motor of

progress, specifically in the youth's eyes, who are 'naturally' more in tune with the inexorable political/economic/societal progress driven by technology.

The second vignette illustrates a parallel set of assumptions, associated with the putative power of technological objects. I was talking with Mostafa Nour, an editor who was working with the director Ahmad Fawzi Saleh on his recent documentary concerning the 2012 Port Said stadium massacre. I asked Mostafa how the editing was going, and he replied that things were fine, adding that Fawzi was undecided about the current cut as usual. He said that he was tired of Fawzi's constant questions about whether it would be possible to bring some technical modification or other to the image. In some cases, as in cropping or rotating an image, the operation was not too difficult in Nour's eyes. Fawzi, he said, would be dazzled (*mabhour*) by these technical feats. In other cases, Nour intimated that Fawzi asked too much, because he thinks that anything is possible with technology. This anecdote illustrates both Fawzi's naïve enchantment with the power of technology and the notion that technology allows unlimited liberty to the mind of the creator. Although Nour exaggerated the director's naïveté, notions of enchantment and indefinite potency are certainly part of the cluster of meanings associated with *teknologia* in Cairo – and, one may add, in Euro-American settings. In fulfillment of Gell's remark, perhaps, 'if we no longer recognize magic explicitly, it is because technology and magic, for us, are one and the same' (1988: 9).

The last vignette confirms all these assumptions at once. When I told Marwan Saber, a well-known cinematographer and the technical director of the camera-hiring company Focus, that I was interested in the influence of technology on the Egyptian film industry, he immediately launched into a monologue on the fast-paced evolution of digital cinema technologies. Ultimately, according to Saber, the cinematographer wants to be able to create (*yebde3*) without limits, so he needs to understand the technology at hand in order

to know what image he can get, and he needs to understand the whole workflow – from shooting to postproduction – in which he is engaged. Being a cinematographer, he said, was about knowledge (*3elm*), especially in a rapidly advancing technological world. Saber then compared technological innovation in cinema cameras with innovation in smartphones, where new software is released every day with an improvement on previous software. A new iPhone version may be much faster than a preceding version, but it will still have many other bugs, such that another version is released to fix the bugs, and so forth. I asked Saber whether older cinematographers have a harder time adapting to the new technology, and he answered that this is generalizable beyond cinematographers. Older people in general have a hard time learning to use new technology, and in support of this claim, he mentioned his father's inability to understand how smartphones work. By contrast, his generation has an easier time adapting because they lived through both phases of technology (both analog and digital). He himself had been a contemporary to the entry of the Internet, mobile phones, and all this '*teknologi*' in Egypt, such that he was predisposed to interact with digital cinema technologies when they took over the Egyptian film industry.

In addition to reiterating the assumption that technology propels fast-paced social change and that it remains ungraspable to older generations, Saber introduced the idea that technology allows unlimited creativity (*ebda3*). The idea that one can do 'anything' (*ayy 7aga*) with technology is indeed very common in Cairo, and it appeals to the artistic worker to the extent that it seems to open a realm of indefinite creation, as Nour seemed to imply with his narration of Fawzi's enchantment with technology⁹¹. What is fascinating, in

⁹¹ This assumption is disputed by some workers in the industry. When I told the star Mahmoud Hemeda that I am interested in studying the impact of technology on the Egyptian film industry, he immediately replied that technology has nothing to do with cinema. He added that the great director Youssef Chahine said that movies needed to be made without artifice – if necessary, without a camera. The socio-technical description presented in chapter 3 ought to put this position in doubt, yet it is evident that Hemeda's statement is directed against the opposite extreme view – the kind of pervading technological

my view, is the way in which these assumptions permeate levels of analysis ranging from the micro-interaction with the iPhone update to the macro-social dynamics of generational divide, artistic creation or, as the case may be, political struggle. The basic idea is that *teknologia* deterministically drives ‘progress’ in these social arenas, and whether one owns an iPhone or works with a digital cinema camera, *teknologia* can be seen to do its modernizing wonder work. To some extent, this work is deemed to occur thanks to the physical properties of the technology at hand. This point was well made in Spitulnik’s (1998; 2002) and Larkin’s (2008) work on radio technology in Zambia and Nigeria, respectively. If these vignettes are any indication, the set of digital objects designated as *teknologia* contribute to making present the set of modernist assumptions attributed to the notion of *teknologia* in everyday life. Progress is, after all, just like regular iPhone updates.

This notion of ‘progress’ needs to be taken in a morally neutral sense: while the examples that I have given so far emphasize a positive valuation, there is a sense in which the ‘progress’ forced by technology is deemed undesirable by some Egyptian filmmakers. When I asked Ahmed Farghalli whether digital technologies made a difference by contrast with analog technologies in the industry, he replied that *teknologia* only made things worse. He used a particular example to sustain his claim. When film material was on film negative (*5am*), he knew exactly that it was ‘there’ whenever stored in correct archival conditions. With digital technologies, however, the files harboring the material can be corrupted, and the material can be indefinitely copied, which makes it easy to steal movie material (as had happened in New Century at the time). Farghalli did not dispute the idea that *teknologia* drives progress in inexorable fashion. He was resigned to the fact that he had to adapt to it, but he did not agree that it was necessarily a positive development, evoking the respective affordances of film negative and hard drives. If one pushes the

determinism evoked by Marwan Saber, whereby *teknologia* seems to become the end-all-be-all of artistic creation.

interpretation, Farghalli seems to argue that the negative was ‘more material’ than the hard drive. He thereby participated in the common tendency to consider digital filmmaking as a ‘dematerialized’ practice – an opinion which I re-examine in conclusion to this chapter.

III. Commodity-Objects in Cairo

Returning to *teknologia* as digital objects, one should note that Egyptian filmmakers make a distinction between personal digital objects (e.g. smartphones, laptops, personal cameras) and specialized cinema equipment (*mo3eddat*, sing. *3edda*) (e.g. cinema cameras, dolly tracks, lighting spots, editing software). The distinction is partly one between *teknologia* and *makan* (sing. *makana*); between digital objects and machines. While some machines count as *teknologia*⁹², the two classes of objects are distinguished by local filmmakers. When I told my interlocutors that I was interested in technological change in the Egyptian film industry, they would assume that I was interested in cinema equipment specifically, not personally owned digital objects. These are in some ways so infused with the everyday that their impact on the work of film production seems negligible. Section IV tries to shake this assumption, but first, I shall give a brief account of cinema equipment (*mo3eddat*) in shooting and in postproduction.

Until the late 2000s, cinema equipment was analog. The standard cinema cameras worked with 35mm negatives, Moviola editing suites were the standard editing equipment,

⁹² Machines may still be considered as pieces of *teknologia* when they are digital. Thus, a Mac computer and a Moviola can both be called *makanet montaj* (editing machine), although the former is clearly a piece of *teknologia*, while the latter can hardly be called as such today. The Moviola may have been considered as a piece of *teknologia* when it was first introduced in Egypt, but since there is now more ‘modern’ equipment (*mo3eddat a7das*), the Moviola becomes relegated to the mechanical realm, while the Mac computer equipped with Final Cut software becomes *teknologia*. In my own experience in Cairo, what is ‘most recent’ or ‘most modern’ tends to be deemed ‘technological’, thereby relegating earlier technological forms into a non-technological state (e.g. VCR equipment, cathode televisions, or radios).

and local postproduction was exclusively conducted in Studio Misr's or the Egyptian Media Production City's laboratories, which treated the negative through coloring, special effects, mixing, and printing. By 2013, when I started fieldwork, the advent of digital cinema had made analog equipment obsolete. In the camera-hiring company Focus, the analog ARRI 535 cameras were no longer rented out, having ceded to the Red Epic and the ARRI Alexa. Moviola editing suites had been out of use for some years according to the editor Heba Othman, having ceded to the Mac desktops with Final Cut Pro software by the mid-2000s. Even the Studio Misr and EMPC laboratories have ceded (except in printing) to private postproduction companies like TimeCode and Aroma, owning stations equipped with digital coloring suites (e.g. Base Light, Luster), digital graphics software (e.g. Smoke), and sound postproduction software (e.g. Apple Pro Tools). Despite these major changes, several pieces of equipment survived the digital turn, chiefly gripping equipment (e.g. dollies, tracks, motions) and lighting equipment (e.g. ARRI spots, Kino Flo soft lights, gels, cables). Thus, the passage to digital cinema equipment did not radically alter the totality of working practices in the Egyptian film industry, except in areas like camera capture, the transportation of (digital) audiovisual material, and the computerization of postproduction.

As I explain in section IV, the digital objects comprised in the local category of *teknologia* are not necessarily experienced *as objects* in the everyday activity of Egyptian film production. To be sure, when I asked direct questions about these objects, I would most likely receive some 'purely technical' answer about the object's functioning. A case in point is a brief exchange I had with the production manager in *Décor*, Mohammed Setohy, who had been complaining about his computer's constant technical failures while we were in preparations. When he joked, 'What's wrong with pen and paper?', alluding to the fact that it would have been his standard equipment prior to the failing computer, I

answered that his work is probably much faster now. He matter-of-factly replied, ‘Of course! I was just joking...’ He did not challenge the technical statement that I made, nor did he historicize the claim according to which production work is much ‘faster’ now. This exchange testifies to the ingrained way in which computers are inserted in a narrative of technological progress beyond the wider socio-technical activity in which it participates. This view of *teknologia* indicates a subject/object dualism current among Egyptian filmmakers. In some respects, this dualism makes them impervious to the observable uses to which these objects are put, as I explore in section IV. This view, in a sense, is a *reduction* of the object’s importance in the filmmaker’s activity.

As a set of digital objects, *teknologia* is not just conceived as a list of technical specifications. They are, more importantly, black-boxed commodities. I borrow the ‘black-box’ metaphor from Latour, who used the term to describe scientific facts whose internal workings are mysterious, yet whose inputs and outputs are known and fairly predictable (1987: 2-3). In a very real sense, *teknologia* is a black-box to Egyptian filmmakers, and each filmmaker has a different level of knowledge and insight into the object’s internal workings. As Sigaut remarks, ‘millions of people around the world listen to the radio and watch television without having the least idea about the way in which these apparatuses work (and I am one of them)’ (2002: 5). Some crew members, like the production assistant Mahmoud Abdallah, are said to be more skilled with digital objects (*shater fil-teknologia*). Thus, Abdallah received regular troubleshooting requests from all production crew members in New Century whenever a device was not working well, or whenever software needed to be installed on a computer, or whenever an app needed to be downloaded. This is the kind of technical ‘knowledge’ that Marwan Saber hints at above: it is a specialized skill with digital objects, which is to be distinguished from the ordinary *savoir-faire* through which filmmakers input and output information on these objects.

Digital objects are not simply ‘black-boxed’ because their technical functioning is unknown, but even more so because the relations of production invested in their making are entirely occulted. Many technological objects have become vital tools in the everyday work of film production, yet no one in Egypt manufactures them. As Focus’ manager Reda Zanita once joked, the manufacture of specialized equipment like digital cinema cameras is not only nonexistent: it is an insult to nonexistence (*ehana lel-sefr*). The same could be said about ordinary technological objects like smartphones or laptops. All these products are acquired via international imports. This situation is explicitly evoked by Zanita in the case of cinema equipment, which is known to be manufactured in very few Euro-American locations. For instance, as Marwan Saber told me, the ARRI Alexa is made in Germany, and any and all repairs to the camera are referred to the German company, since local expertise is insufficient to deal with these repairs. Even if Saber is well-attuned to the camera’s technical functioning, his interactions with the camera *as an object* do not just rely on his own technical knowledge, but also by the technical knowledge made available through instruction manuals, various cinematography-related Internet forums, and major international equipment corporations such as ARRI in the case of complex repairs. With mass consumption goods like smartphones or laptops, the understanding of the object’s socio-technical origin is restricted to the local retailer where the object was purchased and, in a vague sense, the production company’s nationality. The social life of the commodity is therefore reduced to the commodity’s price in a local market and its ‘*quality*’ (an oft-used English loanword) within an assumed hierarchy of manufacturing nations⁹³.

Much like the possession of color televisions in 1990s Egypt (Abu-Lughod, 2005: 220), the possession of technological commodities serves as a class marker in

⁹³ In this sense, the Samsung Galaxy smartphone is superior to ‘Chinese’ smartphones (*sini*, which can also mean ‘counterfeit’), because Samsung is a well-respected Korean company, and Koreans are deemed to be better than the Chinese in manufacturing. The categories ‘Korean’ and ‘Chinese’ do not stand for the actual factories in which actual workers make these objects; they become, rather, quality signifiers ascribed to the black-boxed commodity.

contemporary Cairo. To take a concrete example, the heads of all artistic teams in *Décor* carried smartphones (usually iPhones or Samsung Galaxy), while the assistants did not necessarily have the means to afford such phones. Indeed, many crew members who were not independently wealthy carried the much cheaper Nokia phones. Farghalli was regularly teased by his production team because he owned a MacBook laptop and a tablet, two expensive pieces of equipment, contrasting with the crew members' older, sometimes refurbished PC laptops. The joking comment was that since Farghalli had become a line producer (i.e. had upgraded in the team's hierarchy), his pockets were suddenly filled, and he could spend as he pleased on glitzy technological commodities. The association between the commodity-object and the status of the filmmaker makes the socio-economic inequality manifest. Any crew member who can afford to do so can be expected to buy a smartphone, because it is a sign of superior status independently of one's role in the industry's hierarchical division of labor. This is why many filmmakers were surprised to find that I owned a Nokia phone, precisely because it is atypical of my class background. As Ahmad Fawzi Saleh once joked, he would never touch my pay-as-you-go phone, because he had reached a higher class position as a director and, as he jokingly put it, one cannot regress in the 'class struggle' (*el-sera3 el-taba2i*).

Of course, digital objects have an actual use in the everyday work of filmmaking. It would be reductive, then, to associate their acquisition to a purely class-based exercise in distinction. That said the distinctions between the denotative and connotative aspects of *teknologia*; between *teknologia* and equipment; or between different types of *teknologia* commodities rely on a sharp subject/object divide, both on my part and on the part of my Egyptian interlocutors. As I will now try to explain, this distinction stands in the way of understanding how Egyptian filmmakers actually use technological objects in their everyday activity. In several 'incoming futures', as I argue in section V, these workers

interact with humans and nonhumans in order to confront imponderable problems in filmmaking. In a way, my description cannot escape the division between ‘the filmmaker’ and what s/he does with ‘objects’, as though one could neatly separate the two, yet one should retain a sense of dissatisfaction with this synchronic division. While being a product of my methodological commitment to examining physical objects as they intervene in Egyptian film production (see section IV in introduction), this division is inadequate to understand how filmmakers mediate imponderable problems. Using this inadequacy as an opportunity to propose a new way of describing technological objects and their use, I turn to the way in which these objects act as ‘reserves’ in the socio-technical process of film production in Egypt.

IV. Technological ‘Reserves’ in Egyptian Film Production

The concept of ‘reserve’ is barely developed in Heidegger’s philosophy, but one can engage with it as the underside of a twin notion of the ‘object’. On one hand, there is the object in its objectness (*Gegenstand*), whose physical stuff accounts for its whole existence. On the other hand, there is the object as reserve (*Bestand*), which is dependent on a world of reserves to act as such (1994: 196-198). The reserve is a node within a set of human and nonhuman relations whereby, to any reserve in this ‘network’, there remains a constant potential to be summoned to specific ends by other reserves⁹⁴. To give a simple

⁹⁴ In his classical essay on ‘The Question concerning Technology’, Heidegger distinguishes between an *instrumental* and an *ontological* definition of technology. In instrumental terms, technology is an efficient means to a subjective end: for instance, cameras can take pictures (means) to show an image to the artistic crew (end). This instrumental view is ‘correct’ on a basic level of experience: technology seems indeed like a set of objective means towards subjective ends (Heidegger, 1977: 5-6). This definition is not true to technology’s *ontological* essence, which Heidegger defines as a mode of revealing; a way in which the World is made present to Man. ‘True’ technology is not, therefore, a given means to a given end, but a way of perceiving the world or, more exactly, a way in which the world is made perceptible to us. Heidegger uses the term ‘revealing’ to avoid characterizing truth as man-made, objective knowledge, produced by Cartesian

example, the smartphone-object is a mass of plastic-made electronic stuff, while the smartphone-reserve is a device always already available to summon audiovisual content. This potential summoning, in Heidegger's world, is established by another reserve, whether human or nonhuman. When two reserves interact, it is not on the mode of mutual use or association, but mutual *exploitation*. Thus, when a production assistant like Mahmoud Abdallah uses the smartphone-reserve to take scouting pictures, he is not merely fulfilling his own subjective desire, or simply 'associating' with the smartphone in a Latourian mode. He is exploiting as well as being exploited by the smartphone – his attention is maximally absorbed into the taking of scouting pictures, just as taking scouting pictures exploits his human effort in seeking apartments around Cairo.

In what sense can we understand this 'mutual exploitation'? Again, a concrete example may serve to illustrate the point. When Setohy went to scout an apartment in Dokki as I have described in chapter 3, he summoned his digital camera's potential to take pictures to the end of scouting. From a dull gadget sitting in Setohy's pocket, the digital camera became a technological reserve, committed to being exploited as a picture-taking machine, while committing Setohy's attention to the scouting operation. Of course, experiencing the camera as a reserve is possible *because* no other obstacle obstructs the object's functioning. Thus, the camera needs to be charged once in a while, and Setohy needs to know how to manipulate the camera. The latter point raises the issue of digital knowledge (*3elm*) identified by Saber in section III, which is tied to the *savoir-faire* (or 'know-how') of production crew members as broached in chapters 1 and 2. These obstacles notwithstanding, I would argue that the use of technological objects in

subjects. 'Revealing' suggests, in fact, that truth is never fully available; it is always but a share of the unknown, the hidden, the 'veiled'. Modern technology, in particular, reveals the world and its different entities – man, object, landscape... – as stocks of energy, or 'reserves' (*Bestände*), which are intrinsically bound to be exploited. For a more complete discussion on truth and revealing in Heidegger's philosophy, see Wrathall (2011).

filmmaking is better described as a mutual exploitation among reserves – Abdallah or Setohy become attention-reserves; the smartphone, a picture-reserve.

I should be quick to add, *contra* a strictly Heideggerian reading, that ‘taking scouting pictures’ is not a technological imperative imposed by a mysterious rationalizing force, which Heidegger likes to call *Gestell*⁹⁵. As I have detailed in earlier chapters, technical actions are embedded in a wider set of social relations. Thus, taking scouting pictures is an exercise conducted by ‘legwork’ production crew members at the behest of their superiors, and it is inserted in a production process involving aesthetic and logistical decisions at various stages. In other words, the interaction between Mahmoud Abdallah and his smartphone occurs in a specific socio-technical context, where Abdallah is inserted in an accepted division of labor within a long-term production process occurring in a digitized film industry. With this context in mind, I will proceed to describe technological objects as ‘reserves’ at every significant juncture in the filmmaking process, following the operational sequence detailed in chapter 3.

A) *Screenwriting*: To the best of my knowledge, Egyptian screenwriters use all of pen, paper, and word-processing software to inscribe their scenario and its written ancillaries. In *Poisonous Roses*, the main texts composing the scenario were written on computer, but Fawzi still used a wide variety of notebooks, spare paper, post-it notes, and printed scenarios in the course of reading, writing, and rewriting his text. Even when a

⁹⁵ Heidegger introduced the notion of *Gestell* in his 1949 Bremen lectures, entitled ‘Insight into that which is’. The notion was originally meant to express a totalizing way in which reality is ordered – a way constituting, incidentally, the ‘essence’ of modern technology. Most critiques targeting Heidegger’s conception of modern technology are, in fact, targeted towards his understanding of *Gestell* as an omnipresent, omnipotent, technological mode of revealing reality. According to Verbeek, these critiques deem Heidegger to be either too ‘abstract’, too ‘monolithic’, and/or too ‘nostalgic’ (2005: 61-75). While the two initial charges are directed towards his general understanding of *Gestell*, the third charge targets his romantic longing for a pre-technological age – a longing which, while not straightforwardly technophobic, is implicit in his views on modern technology. These charges are unsurprising, since Heidegger never considers modern technologies from an empirical perspective: instead, he makes broad claims concerning Technology as it reveals Reality to Human Existence.

screenwriter only writes on paper like the industry's best-known screenwriter, Wahid Hamed, his writings are transcribed on computer before being printed to the rest of the crew. While I did not participate in any screenwriting session in *Décor*, my initial involvement with the film was via the scenario in its printed version. Since screenwriting is an exercise restricted to the screenwriter, the director, and their close interlocutors, all other crew members have no access to the practice of screenwriting except via these printed copies. Still, the various forms taken by the scenario and its ancillary inscriptions offer significant material to the screenwriter and the director in order to develop their ideas, and the analyst cannot afford to ignore these mediators in describing screenwriting as a daily activity.

My experience with Fawzi in *Poisonous Roses* illustrates the point. What counted as an 'idea' (*fekra*, pl. *afkar*) was situated between our oral conversations and the various notes we made on paper in the course of thinking about the scenario's final form. Some fleeting suggestion made by Fawzi could be brought into the conversation some days later, if he and I had any memory of it, or if it was written down in our notes. The modifications undertaken by the scene described in chapter 3 serve as a good example. A scene where Taheya was originally going to walk by lingerie stores in downtown Cairo became, on one night in the summer of 2015, a scene where she ordered new shoes for Saqr from a tanning workshop. Some days later, an additional detail was added to the scene when it appeared on Om Saqr's handwritten list of scenes that she had disappeared from the narrative too long at this juncture in the scenario. Once we had agreed on including new ideas, then, what was written down on paper was used in rewriting word-processed scenes. Thus, the extensive character profiles made for each protagonist in *Poisonous Roses* on paper were later transformed into scenes which were written on computer, and these scenes were read and criticized by our trusted interlocutors, leading onto additional rewriting.

Of course, all these versions, combined with our live discussions, were transformed in every screenwriting session, but the transformation did not occur at the whim of our interlocutions. Rather, it evolved through the manipulation of large blocks of word-processed text, allowing us to think through the writing of a scenario that conveyed Fawzi's desires. This practice is more accurately grasped by saying that the various technological objects we used in inscribing written mediators were 'reserves' which, on one hand, contained a potential to maximally summon ideas, while maximally summoning our attention towards creating 'the film'. This mutual summoning flattened the interactions between Fawzi, his AD Yousef Abodan, me, and our written mediators in screenwriting, making our own imaginations into 'reserves' maximally set onto the creation of *Poisonous Roses*. Until he underwent this dialogical discussion-cum-inscription process, on his own account, Fawzi did not know exactly what he wanted to say in his film – '*ana mesh 3aref 3ayez a2oul eih*', in his words. I take this statement to mean that he could not exactly determine the movie's plot, let alone its visual appearance, without engaging with a variety of interlocutors and mediators, all summoned to act as 'reserves' in the practice of screenwriting. This iterative practice is possible thanks to these reserves: iteration presupposes, indeed, dedicated surfaces upon which the scenario's text can be inscribed and reinscribed, whether the blank paper, the computer screen, or Fawzi's interlocutors. These reserves preserve the scenario's content as an evolving potential, slowly but surely materialized in our screenwriting sessions as we were summoned to create the scenario.

B) Preparations: The technological objects used in preparations vary according to the filmmaker's role in the division of labor and the specific operation at hand. The direction team and the production team use personal mobile phones, computers, and various kinds of paperwork in order to coordinate the logistics of film production (see chapter 5). All

members in *Décor*'s crew carried a mobile phone. Many carried smartphones, but less affluent workers would have Nokia-like phones. Farghalli was exceptional among hierarchically superior crew members in that he carried an old Nokia phone. When I asked him why, he said it was because the phone was reliable and had an extensive battery life. Likewise, on our scouting mission in Dokki, Setohy told me that he bought his current camera with a rechargeable battery because the earlier ones needed AA batteries, so they could not bear his long working days. Farghalli's and Setohy's interest in their equipment's battery is bound with a more general concern with 'being available'. Farghalli, Setohy, and their crew members in New Century were never entirely relaxing, whether at work or outside, because there are strong expectations about their availability by phone.

While Farghalli remained available by showing up at New Century's office, he could also be reached by phone at all times. If his phone died, he could not be reached except by having someone meet him in person. This is inconvenient, if not damaging in urgent time strains, when his presence is immediately required to settle some production issue. In my experience, this expectation to 'be available' depends on one's position in the industry. Although the director Ahmad Abdalla had license to not answer his assistants or the line producer in *Décor*, a 'legwork' production crew member would get scolded by Farghalli were he to not pick up the phone. On countless occasions, I have seen Farghalli being irritated by the fact that a crew member did not pick up the phone after a few calls, and if the crew member calls back any time thereafter, Farghalli's first question would be, '*Ma betroddesh leih?*' ('Why don't you answer?')⁹⁶. The expectation to remain available

⁹⁶ This question is regularly heard in everyday life in Cairo, after someone rings someone else many times without receiving an answer. Not answering is rarely interpreted as an ordinary occurrence (e.g. the phone was away) or as a technical default (e.g. the battery died), but it is seen as a conscious decision to not answer, which begs the question as to why the receiver is not answering the call. In ordinary cases, the receiver will reciprocate with a friendly apology, by blaming his phone or the network, or even by denying that the caller ever called. The consequences, however, rarely reach beyond this polite exchange. In the

by phone extends over all stages in production, such that the phone transforms the production crew member into a prime reserve of attention, at all times and in all places, while becoming itself a reserve of communication. Thus, the phone-reserve is a constant physically present potential to summon the filmmaker's attention to specific tasks, and s/he is thereby compelled (by social and labor norms) to answer the phone.

This potential can be thwarted in practice when production crew members avoid answering the phone. Whenever Setohy was concentrating on making a to-do list or writing some permit-making letter, or whenever a 'legwork' production crew member was addressed by his superiors in *Décor*, any incoming call from a friend or a family member would be silenced until they were not working on something more important. On set, all crew members silence their mobile phones, so as to not disturb the ongoing recording of sound, and they must leave the immediate vicinity of recording equipment in order to talk freely. One can still see how the constant ringing of the phone, in many cases, summons the filmmaker's attention, which is compelled by his pre-existing commitment to a specific working task. Even if Farghalli perceived the 'phone itself' as an object which works on a minimal technical level (*by2oul allô*, 'it says hello', as he would say), the phone-reserve has the potential of channeling his everyday work to specific ends – whether a production crew member wants to report back to him, or the director Ahmad Abdalla wants to ask about an apartment in scouting, or the AD Omar el-Zohairy wants to follow up on the director's demands, or the art director Asem Ali wants additional money (*3ohda*) to buy a new prop, or Farghalli himself wants to report to the general manager Badawy over the budget, or wants to change the scouting journey of a 'legwork' crew member.

Egyptian film industry, by contrast, Farghalli's question implies that the crew member seeks to avoid work, or at least is not doing his job properly, which elicits impassionate denials by crew members, or profuse apologies. In fact, when Farghalli or Setohy left missed calls on a crew member's phone, the crew member's next call would begin by an apology about not answering earlier.

In addition to mobile phones and their use in immediate communication, personal computers and paper printouts were used in all the projects that I have observed to inscribe a variety of mediating writings in preparations, including scenario breakdowns, handwritten to-do lists, paper receipts, or accounting paperwork aggregating the costs of a set of receipts (*7awafez*, sing. *7afza*). Taking one example akin to screenwriting, the technological objects involved in scenario breakdown (and, subsequently, in designing the shooting schedule) actively intervene in the AD's task. In *Décor*, Zohairy worked across a scenario copy annotated by hand, scribbled notes, and tabularized lists of logistical elements constituting, after extensive review by his assistants and him, a final scenario breakdown. From the scenario's pre-inscribed matter, Zohairy molded a breakdown through iterative inscriptions and transcriptions, in such a way that he could, as he said, 'learn the film by heart' (*ye7faz el-film*). This highlights the expectations set on the AD as a record-keeper of artistic work, which explains why the physical breakdown bears an important mnemonic weight in the execution of a shooting day (see chapter 5). The breakdown, in this sense, becomes a reserve of logistical elements, summoning the AD's attention to the sum of artistic demands to be executed and verified on set.

The widespread use of paper in preparations is supplemented by a selective use of digital cameras, including smartphone cameras, which are used to take scouting pictures, casting videos, or fitting pictures, as the case may be. In *Décor* and *Poisonous Roses*, these pictures were shown to artistic crew members in person or via email. These workers, in turn, would show each other 'reference' pictures – including scouting pictures, prop pictures, costume pictures – on their respective laptops, tablets, or smartphones, either in person or via USB keys, via email, or via social media like Instagram. In *Décor*, for instance, the artistic crew created an Instagram group through which they could share and see each other's images, including paintings or photographs to inspire their creative senses.

Fawzi once told me a similar thing while sitting in a downtown café prior to shooting in *Poisonous Roses*: he said that he was no longer afraid of what his film will look like, because he had seen 20,000 images, including innumerable scouting pictures of the tanneries district, as well as a great number of movies, paintings, and photographs, which serve as a kind of visual capital out of which he can craft his own cinematic style.

The sustenance of this visual capital, which is integral to the presumptions made by artistic workers over the film's look, is itself indicative of the importance of technological objects. The mobile phone's, the computer's, or the paper's constant potential to be summoned to reveal a scouting picture, a prop picture, or a casting video to concerned artistic crew members is matched by their anguish over 'the film' in the course of production. This is especially visible in cases where visual mediators circulate between artistic crew members – e.g. when the art director Asem Ali sends prop 'references' from his smartphone or his laptop to Nihal Farouk in order to decide on whether it 'looks good' (*7elw*) or not; or when the stylist Salma Sami sent an email with Horeya Farghaly's latest fitting pictures to Ahmad Abdalla in order to discuss the actress' look; or when Zohairy scrolled through casting choices on the *regiseir's* picture/video database in order to select extras in *Décor's* final scene in the movie theatre. In each case, there was no difference (analytically speaking) between the laptop and the smartphone, just as there was no difference in the artist's relation to the laptop as opposed to the smartphone. The object has a constant potential to yield visual mediators or digital content created by online users, and the artistic crew member's attention to her creation is always potentially summoned. The object and its users are thereby flattened in a relation of mutual exploitation – they become, in short, reserves.

In addition to producing and storing digital images with various uses, the technological objects carried by artistic workers can serve to *draw* designs. This is

especially the case with set and prop designs, because costume design and lighting plans were, to the extent of my experience in *Décor* and *Poisonous Roses*, a pencil-and-paper exercise. Digital drawings made by Asem Ali, Nihal Farouk, and their assistant Mohammed Ezzat in *Décor* were not just inscribed on their laptops: they were frequently printed out and supplemented by handwritten notes and handmade drawings. As I explained in chapter 3, Farouk would draw floor-plans in AutoCAD, while Ali and Ezzat would draw furnished designs in SketchUp, but they all sketched rough pencil outlines before inputting the sketch in computer software. No matter the technique used, the art directors discussed their designs in person in New Century's office: since digital drawings came in very heavy formats, it would have been very difficult to send them by email or upload them on social media. Watching art directors and their assistants engage in ever-so-slight adjustments to their designs by a click of the mouse or a stroke of the pencil, I became keenly aware of the way in which their imagination was not immediately transposed on paper or on computer, but constantly adjusted in dialogic unfolding, where the technological object and its user become locked in a relation of mutual exploitation to the end of drawing the design.

C) Shooting and postproduction: Many of the technological objects used in preparations are used to similar ends in shooting and postproduction, since they are personal objects carried at all times by each crew member. Thus, the use of paper and phones by the production team in logistical coordination extends over preparations and shooting (see chapter 5). Likewise, in the shooting of *Décor*, the continuity script supervisors Jaylan Auf and Mariam el-Bagoury used an annotated scenario copy made in preparations as well as pictures and videos on set in order to ensure the continuity of dialogue, movement, or costumes. And again, picture-sharing among artistic workers on computer and

smartphones has continued into shooting in *Décor*, just as adjustments to each take continued to be informed by these pictures. That said, I would like to highlight three technological objects which are distinctively used in today's Egyptian film shoots: the main camera, the video-assist monitor, and the microphones.

As I explained in chapter 3, the main camera organizes the space of the set. It is manipulated by the cinematographer or the cameraman, and it is serviced by the focus puller and the camera technicians⁹⁷. While the cinematographer and the cameraman tend to look into the viewfinder to check the recorded action, it has become standard practice to add a monitor over the camera's body in order to help the focus puller with adjusting the image's blurriness and, when a video-assist is impracticable, to allow the director to check the action. The video-assist can be impracticable in a financial sense, as was the case in *Poisonous Roses*, where Fawzi spent several shooting days looking into the camera's monitor to avoid extra expenses. The video-assist can also be impracticable in a logistical sense. In *Décor*, for instance, in an extreme long shot where the art director protagonists Sharif and Maha appeared in the distance on a rocky beach in Alexandria, the video-assist Adil told me that even though his Atomos monitor was wireless, it only had a range of 35 meters in clear conditions, and only about 25 meters in the morning weather we were shooting in, which meant that Ahmad Abdalla had to come next to the camera's monitor when he wanted to check whether his first take was good or not.

⁹⁷ Cinema cameras need to be assembled and disassembled at the beginning and the ending of each shooting day. While camera components vary according to the production's budget and artistic needs, the Alexa camera used in *Décor* included a full range of components: the camera's body, the battery (which comes with some spares), the lens (which comes with a box including 'sets' of lenses arranged by diminishing frame size), the matte box (which comes in a box filled with filters designed to fit in the matte box), the caches (which are used to obviate direct light into the lens), the follow-focus (which allows the focus puller to adjust the depth-of-field), the electronic viewfinder (which provides the most accurate image of the take to the cinematographer), and the monitor (which provides a less accurate image yet allows the focus puller to follow the image's neatness). These various parts were changed at different times in the shooting day. The body was generally kept with a battery, a matte box, a follow focus, and a monitor at all times; batteries were changed every few hours; lenses/filters were adjusted on the director's or the cinematographer's command.

No matter the setup involved, Ahmad Abdalla and Ahmad Fawzi Saleh sat next to the video-assist monitor with their artistic crew in order to follow the action in the take and give instructions on adjustments in between takes. Thus, the camera and the video-assist are central congregating points on set, as artistic workers gather to comment on their image, and any adjustment to the image is communicated with the camera's or the video-assist's monitor as a reference. Again, the analytical distinction between these monitors and the artistic crew is flattened if we consider that they are reserves: the monitors are summoned to reveal the shot's image, while the artistic crew's entire work is summoned to adjust this very image. So much more is happening on set, of course, not least being the logistical groundwork to the shooting as I shall describe in great detail in chapter 5. These reserves, however, were integral in mediating the imponderability of the film's image to artistic workers in *Décor* and in *Poisonous Roses*.

In a sense, the congregation of higher-end crew members around the video-assist is a spatial manifestation of the extent to which the image is valued over sound in Egyptian film production. This undervaluation extends to the microphones recording the shot's sound, even though they are vital mediators to the sound engineer. Microphones are not mere sound-recording machines, but also live reserves summoning the sound engineer's attention to monitor the quality of his sound material and anticipate the sound's postproduction. This is indeed what the sound engineer Ahmad Saleh told me when I asked him why he did not ask to get re-takes on shots where the recorded sound was imperfect⁹⁸. Saleh said that he would avoid re-taking because he could anticipate, while

⁹⁸ The sound engineer's general authority over re-takes is restricted to technical issues (e.g. in *Décor*, Horeya Farghaly's voice was sometimes too low to be audible, which prompted a re-take). This authority, however, is subordinated to the director's and, to some extent, the cinematographer's authority. In practice, this means that a take where the actor's visual performance (*ada2*) and the image composition and movement are good will put an implicit pressure on the sound engineer to *not* ask for a re-take and deal with sound issues in postproduction. This pressure is well illustrated by Farghalli's comment to Ahmad Saleh, while we were shooting in an apartment in *Décor*, to the effect that he should remove the background noise of water pipes in 'dubbing' (*doublaj*), instead of hassling production assistants with finding and shutting down the house's tap.

listening to his on-set sound, how he will eventually repair sound errors in postproduction. Thus, his attention to the film's sound environment is not prior to the recorded sound itself. Rather, it is summoned by the microphone-reserve, which in turn summons on-set events into becoming recorded sounds.

Since postproduction has been digitized in the late 2000s, chemical and mechanical equipment has given way to computer software in image editing, sound editing, coloring, graphics, and mixing. Thus, today's postproduction work is centered on computer monitors. Familiarity with computer software has become the single most important prerequisite to working in postproduction. As the editor Sara Abdalla put it when I asked about her 'human' relation with Final Cut, 'it's like when you get used to your house: you know where you've put everything, you know how to move in it, you're at ease in it, and you won't be annoyed if you want to bring people to look around, you know it's your space.⁹⁹' This habituation to digital technologies, I argue, enables iterative discussions between postproduction screenworkers (e.g. the editor, the colorist, or the sound editor) and their artistic discussants (e.g. the director and the cinematographer). Much like in screenwriting, postproduction work extends across various technological objects, including the smartphones through which working times are coordinated and the paper notes through which live discussions are recorded, even though the end result is completed on computer. Postproduction work, then, occurs between the screenworker, the director, and the computer monitor, where the monitor serves again as a reserve whose content is summoned to specific technical ends in a given discussion, while summoning each worker's attention to a common audiovisual reference, extending their working space like a 'home' as Sara Abdalla put it.

⁹⁹ The original quote in Arabic is more evocative: 'zayy ma-ta5od 3ala beitat, 5alas, enta 3aref 7atet kol 7aga fein, 3aref btet7arrak fih ezzay, w-enta mestarrayya7 fih, w-law hate2dar tgib nas yetfarragou mesh hateb2a mettdaye2, ya3ni, 7ases ennak f-makaanak'.

In describing the use of technological objects in Egyptian film production, I have avoided the language of actor-network theory, where humans and nonhumans interact via neutral ‘relations’ or ‘associations’ (see Law, 1992; Latour, 1996a). Such a language would have given a useful map of the daily meanderings of Egyptian filmmakers across technological objects, yet I argue that it is inadequate to explain why these objects have a hold over the work of film production. As I have experienced it, the relation between workers and technological objects is not a mere link between human and nonhuman actants, but a constant potential to summon mutual commitment towards concrete tasks. Thus, the symmetry between object-reserves and filmmaker-reserves is not a neutral ‘relation’ (a thing + another), but a ‘summoning’ (a thing destined to exploit another). Again, in contrast with a strictly Heideggerian reading, I have tried to highlight the social relations thanks to which this summoning occurs in Egyptian film production. Crucially, the quality of technological objects as reserves colors the way in which they are summoned to mediate imponderable problems. Without being tools to solve these problems in a cause-to-effect manner, the numerous possibilities that these reserves can summon allow the filmmakers with whom I interacted in *Décor* and *Poisonous Roses* to engage with the future of their filmmaking activity, whether in trying to anticipate the film’s logistics (chapter 5), its aesthetic form (chapter 6), or its imagined audience (chapter 7).

V. On ‘Incoming Futures’

One might argue, just as Egyptian filmmakers using commodity-objects, that I burden the notion of *teknologia* with an unnecessary distinction between objects and reserves. The analytical gain, however, is that even when they are conceived as mere ‘objects’ by Egyptian filmmakers, these objects remain ‘reserves’ that constrain their activity in ways which command attention to their observable uses. While technological objects can have recognizably different affordances, their uses as reserves remain continuous insofar as they commit the user’s attention to specific, future-oriented tasks. Surely, there is a material distinction between a paper list of calls and Setohy calling his assistants by phone. What I contend, however, is that both the written to-do list *and* the oral directives instantiate near-/far-future issues on Setohy’s mind, with written demands being inserted in a longer timescale to the more immediate commands given by phone. To insist on the material distance between the word and the voice in such cases is, in my estimation, to confuse ‘materiality’ with ‘ephemerality’ – that is, to mistake the paper’s apparently ‘solid’ presence with a material existence that is denied to the ‘immaterial’ phone call¹⁰⁰.

What I would argue, instead, is that both writing and speech are materially coextensive in mediating imponderable problems, *insofar as* they materialize variously ephemeral timescales to the concerned crew member’s mind. This role can be played by pre-digital just as well post-digital technological objects. The PDF to-do list is not ‘more material’ than Setohy’s call. Nor is it more or less good at what it does whether it is on computer or on paper. Rather, it is inserted in a more or less extensible timescale within Setohy’s workday, where it acts as a reserve just as it summons Setohy’s attention to his

¹⁰⁰ This kind of confusion is apparent in Danet’s article on the transition between ‘late print culture’ and ‘early computer culture’ (1997), where she describes the experience of new writing technologies as a process of ‘dematerialization’. Here again, the text inscribed on computer is denied a materiality which is attributed to the ‘solid’ paper. Although one may intuit that both paper and computer files are somehow more ‘material’ than phone calls, there is no compelling conceptual reason to attribute more or less materiality to each. In line with Ingold (2007), I would argue that the conceptual trouble lies in the very use of ‘materiality’ as a trope, whereby one seems to suggest that some aspects of our experience are ‘more material’ than others. This is precisely where a commonsensical notion of ‘solid’ writing vs. ‘ethereal’ speech can strive without being subject to re-examination.

(future-oriented) work. This whole discussion does not eliminate the possibility that the reserve might be conceived as an object by its users, but this possibility becomes thereby confined to a *specific* moment in the life of the object/user interaction. These moments are ever more important to distinguish when considering how the object/user interface becomes centered on future-oriented tasks, such as when Setohy took scouting pictures in *Décor*, or when the art directors in *Décor* designed the set, or when Ahmad Saleh verified his sound's quality while recording it, or when Sara Abdalla worked through successive cuts. This is why it is important to consider, in conclusion, what I would like to call 'incoming futures'.

My conception of incoming futures is an attempt at translating the French distinction between *le futur* and *l'avenir*. While I take *le futur* to be a neutral spatiotemporal awareness of the existence of a future, as a consequence of the linear view of time in late capitalist societies such as Egypt, I take *l'avenir* to be a more subtle protention towards what is to come. The term, indeed, could be broken into two segments – *à venir* – literally translated as 'that which is yet to come'. While both *le futur* and *l'avenir* are ordinarily used to designate the future as a general time-space, I would argue that *l'avenir*, especially when pluralized to *les avènements*, or 'incoming futures', invites a conception in tune with the way in which filmmakers engage with near-future/far-future outcomes. To take a concrete example, Setohy's work in taking scouting pictures is not outwardly oriented towards a general, fundamentally uncertain and unknowable future. Rather, Setohy knows that, in an 'incoming future', his scouting picture will be taken by Farghalli (which happened on the same night when we went to scout in Dokki) and will be seen by artistic crew members (which happened a day or two later). The incoming future of scouting in Setohy's perspective makes his apprehension of a logistical problem like preparing a shooting location *contingent* rather than *uncertain*. Setohy cannot anticipate all

the courses of action in which all actors involved in this incoming future will be engaged, but he can anticipate (based on his previous experience as well as his position in a particular labor hierarchy and production process) what this incoming future will look like, as well as the contingent decisions that he needs to take in order to actualize it. In brief, ‘much is predictable enough, but what we cannot have is certainty’ (Graeber, 2012: 26).

There is an important parallel between ‘incoming futures’ in film production and Bakhtin’s concept of the ‘chronotope’ (1981). The chronotope, according to Bakhtin, is the particular time and space in which a novel’s action is set to unfold – it is a literary construct whereby diegetic action is set within a fictional frame of reference. The incoming futures experienced by Egyptian filmmakers are not set by discursive convention, and I would never say that their experience is fictional in any sense. Yet, it is possible to imagine that each filmmaker’s experience, much like the experience of novelistic characters, is framed by spatiotemporal constraints set by professional convention, cultivated by experience, extending beyond the immediate present and setting him/her in relation to a specific *avenir*. Thus, the priority implicitly accorded to a Cartesian space where variously positioned subjects/objects progress through chronological time needs to be rethought when examining timescales bridging between the immediate and the incoming. Like with Bakhtin’s chronotopes, then, the notion of incoming futures points not only to the way in which subjects/objects exist in historical time, but more importantly, how they are endowed with an ability to project themselves in time-spaces transcending the here and now. This does not in the least imply that they do not experience space-time in a chronological manner. I would just like to put forward the subject’s ability to engage, in the present, with incoming futures beyond the chronological, which is what gives Egyptian filmmakers an ability to deal with imponderable problems.

In following chapters, I address the way in which filmmakers deal with different imponderable problems in different ‘incoming futures’. Chapter 5 examines how executive crew members mediate the imponderability involved in the incoming future of a shooting day; chapter 6 examines how artistic workers mediate the artistic imponderability in the incoming future of ‘the film’; chapter 7, lastly, examines how the imagined audience is situated in an incoming future of enchantment, where the film’s enjoyment is predicated on the erasure (or, as I call it, the ‘reification’) of the worker’s concrete labor in crafting a movie. No doubt, the notion of ‘incoming futures’ is much broader than the Egyptian filmmaker’s specific engagement with his/her own activity. Nevertheless, chapters 5 to 7 remain centered on my ethnography of Egyptian film production to talk about specific incoming futures which, in my experience, were more salient in the everyday life of film production. ‘Incoming futures’, then, are not abstracted at the expense of the chronological, spatiotemporal, socio-technical progress of film production. Rather, I wish to emphasize that this progress is never simply ‘given’ in the present – it occurs, in a very real sense, within a specific relation between the present and unknown-but-not-unexpected *avenirs*.

Chapter 5

Preparing and Executing a Shooting Day

I. Preparing and Executing

I recall the stench of cigarettes, made salient by the overflowing ashtrays on a large wooden table, covered in miscellaneous paper, some laptops, some smartphones, one or two CDs, tea glasses, phone chargers, and a 3-in-1 photocopier, when it had not been stolen by another production team. This is how I spent my evenings in New Century's office: with production crew members reviewing paperwork, coordinating legwork missions, exchanging scouting pictures, giving each other directions, revising the budget – in short, planning the next shooting day. The complex logistics of *Décor* were handled in this office by Farghalli's production team in conjunction with assistants in each artistic team – i.e. the AD, the assistant decorator, the assistant stylist, the assistant editor. I have been given to observe film logistics in action with several more or less experienced production teams. While I was told by Farghalli that each team has a different '*system*', they all face logistical issues in need of more or less urgent solutions. These solutions are never complete *a priori*, since the overall outcome of logistical planning and execution is imponderable at the start, while the intermediate solutions to which social agents arrive are contingent on the film's day-to-day unfolding. As I have illustrated with the opening vignette in the introduction, no one could know in the December 8th preparations meeting in *Décor* how the movie's *avant-titre* would be shot some weeks later, let alone how the entire movie would be shot. This does not mean that production crew members capitulate

to uncertainty. Rather, they rely on a set of assumptions and mediators to manage the imponderability of preparing (*ta7dir*) and executing (*tanfiz*) a shooting day.

Farghalli and his team were not heroic subjects who prepared and executed perfect plans in *Décor*. The trouble was not just the perfection of the plan or the accuracy of execution, but the difficulty inhering in setting standards over ‘who does what when’ in order to successfully prepare and execute the shooting. The division of labor described in chapter 2 addresses the ‘who does what’ in most respects, especially with the executive hierarchy of command under Farghalli’s authority. The ‘when’, for its part, has been addressed in chapter 3, which describes how production operations are sequenced in an accepted socio-technical path. In chapter 4, I have suggested that technological objects act as ‘reserves’ to executive crew members in preparations and in shooting. These crew members summon the reserve’s ability to reveal written mediators while being summoned to execute their specific tasks in film logistics. Thus, prop breakdowns serve as a reminder to the production team and the prop team that they need to buy, make, or rent specific props in the incoming future, while summoning each concerned crew member to commit to their specific tasks. This summoning is not bound by the restricted interaction between filmmaker-reserves and object-reserves, but inserted in a much wider set of socio-technical relations as described in chapters 1 to 4.

With all the logistical work accomplished by workers in an accepted division of labor within a more or less predictable operational sequence via technological objects, the shooting day still remains, on the whole, an imponderable outcome. What preparations and execution involve, then, is an attempt to *mediate* this outcome by breaking it down into a set of contingent tasks, assigned to specific crew members at specific junctures in the production process. To an individual like Farghalli, the imponderability of preparing and executing a shooting day becomes, through this mediation, a series of punctual tasks to

which he is assigned – and assigns others – given certain assumptions about the work of film production and certain written and visual mediators summoned by technological reserves.

In this chapter, I substantiate this argument by examining how a shooting day is prepared and executed in today's Egyptian film industry. In section II, I describe some logistical issues in the work of preparations – above all, budgeting, transportation, and scheduling. I try to give a sense of the extent to which these tasks are, to the individuals in charge, imponderable without being uncertain. In section III, I illustrate how logistical planning is never perfectly executed on a shooting day by describing the ways in which executive crew members try to avoid recurrent failures, or '*drops*'. Moreover, I describe the expectations placed upon executive workers to be 'on call' and faultless in their daily work – an expectation which bears important consequences on the way in which contingent tasks are executed. Section IV examines how reserves contribute to mediating the shooting's overall imponderability. I explore, in particular, how they summon written mediators inscribing both what should be done and what remains to be done in each stage of production, thereby acting as a kind of surrogate memory for film logistics. Section V, by way of conclusion, ties the core argument with wider social scientific conversations about the influence of digital technology on the experience of work in late capitalist societies.

II. The Logistics of Preparations

A) Budgeting: The logistical problems involved in preparing a shooting day, let alone an entire shooting schedule, can only begin with budgeting. In preparations, a budget is made

available by the producer to buy props and costumes; to rent camera equipment; to buy materials for set/prop building and pay the craftsmen's weekly salary; to pay advances on salaries (*3arabin*, sing. *3arboun*); to provide 'gifts' (*ekrameyyat*) to permit-making bureaucrats, police officers, or local 'fixers'. In shooting, the preparations budget is burdened by weekly payments to the cast and crew, equipment rental, and on-set emergencies (e.g. buying a prop or costume that was forgotten). While larger productions like *Décor* have enough liquidity to satisfy these costs, smaller productions like *Poisonous Roses* have to prioritize what they try to pay first. In practice, this meant that trusted crew members in *Poisonous Roses* had their payments delayed in order to cover more 'pressing' costs (e.g. paying for a prop or a costume bought in a commercial boutique, or paying workers who cannot accept payment by installments, which is still a common practice in the industry). While the experienced line producer can anticipate most production costs, various contingencies can affect the actual amounts paid as opposed to the budgeted ones (including extra days of shooting, an exigent bureaucrat who will not sign an important permit-making letter, a last-minute demand by the director). These contingencies make budgeting into a tentative and ever-adjusted exercise – even to an experienced line producer, in fact, the discrepancy between the budget and the film's expenses remains imponderable.

Furthermore, since all transactions in the industry are in cash, the physical flow of cash requires some planning. In larger companies, the accountant is responsible for handling all the books *and* all the cash, which is why New Century's accountant Mohammed Hosny would frequently come on set in *Décor*. Sometimes, he would come to deliver an advance on the budget; other times, he would deliver wages. Hosny's mere presence on set elicited a number of jokes about 'getting the *zarf*', the white envelope containing weekly salaries, although Hosny would come much more frequently than the

weekly payment time¹⁰¹. In a context where cash transactions leave no trace (and, as I have heard, are sometimes intended to leave no trace), the accountant's importance lies in tracking all cash transactions with the help of his paper records, which may or may not be the company's official records. In this sense, throughout the production process, the imponderability of cash flows expended according to the initial budget is handled by two specialists, the accountant and the line producer, thanks to some written mediators as I elaborate in section IV.

B) Transportation: Next to budgeting, transportation is a major logistical issue in preparations and in shooting, which is compounded by Cairo's legendary traffic. Discussions about traffic are evidently not unique to the film industry, but they have a direct impact on the logistical work involved in preparations and, as I explain below, on every shooting day's schedule. Although it is common to flaunt the traffic's unpredictability in Cairo, a little like the English flaunt the unpredictability of the weather, Cairenes use various heuristics to judge the severity of traffic and, accordingly, when and where to set their meetings¹⁰². For instance, crew members like Ahmad Farghalli, who live near one of the major arteries in Giza, on the west bank of the Nile, would try to avoid this road at all costs in the middle of the day, between 12 and 7 pm. Similarly, transport is avoided in 'bureaucrat' hours, at times where government employees start and finish work,

¹⁰¹ In smaller productions, or in emergency cases (e.g. an unexpected sum of money is required to keep the shooting day alive by paying off some rowdy intruders), cash can be handled by trustworthy emissaries until it reaches the location. In *Décor*, these emissaries have been legwork production workers or trusted drivers in the car services sub-team. This is not preferable to the line producer or the accountant, however, given suspicions over theft and the emissary's inability to record the exact amounts delivered.

¹⁰² To the extent of my experience, these assumptions take into account one's neighborhood of residence and means of transportation, both of which index a certain class belonging. This was especially striking in *Décor*. Artistic crew members like Ahmad Abdalla (director) or Tarek Hefny (cinematographer) or Asem Ali (art director) lived in affluent neighborhoods, and they travelled respectively by car, by motorcycle (not the more popular *Vespa* or Chinese motorcycles, it should be noted), or by taxi (which is the most expensive means of public transportation). Non-artistic crew members, like Ahmad Farghalli (line producer), Mohammed Setohy (production manager) or Mohammed Desha (best boy gaffer) lived in popular (*sha3bi*) neighborhoods, and travelled by the production's microbus (which gathers several crew members in the same trip on the way to work and back), private microbus, or the metro.

respectively around 8-9 am and 2-3 pm. Since these streets and hours are assumed to be congested (*za7ma*), crew members who can coordinate meeting times outside these hours usually prefer to circumvent the congestion¹⁰³.

For example, on the day when I went scouting with Setohy in Dokki around 6-7 pm, he apologized to me about not being able to meet earlier in the afternoon as we had agreed on the previous day. Setohy said that he was scouting two apartments in the Ba7rel-A3zam neighborhood in Giza, which is a 20 minutes drive from Dokki without traffic, although the same journey can take an hour or more by day. Since the traffic was horrible, he calculated that I would not be able to make it from Dokki to where he was, so he thought that it was better if I just stayed in Dokki until he made it back to the office, barely, by 5 pm. This kind of calculation is common to anyone who has tried to brave Cairo's traffic, but it illustrates more importantly how some crew members in film production – above all 'legwork' production workers, who do not have the luxury of avoiding Cairo's harshest congestion times – mediate the imponderability of traffic via heuristic calculations. These calculations come in handy in many cases, whether they visit various state administrations in 'bureaucrat' hours to secure film permits; or whether they venture into busy day-only markets like Ataba to buy props and costumes; or whether they have to travel across multiple neighborhoods in heavy traffic to make it to successive appointments in scouting, as was the case with Setohy on that day. In fact, when production assistants came to New Century's office after a long day 'in the streets' (*fil-share3*), they would discuss which streets they ought to have avoided, or which means of

¹⁰³ This is partly why filmmakers tend to meet at 'unconventional' hours, either late at night or in the middle of the bureaucratic day. This is also why the circulation of film-related documents (e.g. permits, digital film material, prop 'references' carried on USB keys) would take place early in the day or late at night in *Décor*.

transportation they should have taken, sometimes half-joking that they should have walked throughout the city¹⁰⁴.

While legwork missions were distributed by geographic area in New Century's production meetings, thereby alleviating the burden of cross-city journeys, these geographic areas can be extensive enough to still make traffic a significant obstacle, even with all heuristic precautions taken by legwork crew members. One day in the preparations of *The Cat and the Mouse* (dir. Tamer Mohsen, 2015), the production manager Tamer Fathi came back to the office cursing with his assistant Khaled Ahmed that they would never go out on a scouting mission again. They had been assigned by Farghalli to look at different hotels in 6th of October City, but while the roads within October City were normally free by day according to Fathi, they were all somehow jammed on that particular day, as were the roads between October City and Dokki (where New Century's office lies). Thus, what was supposed to be a manageable scouting trip in a nice neighborhood on the outskirts of Cairo turned out to be a calamitous ride in traffic. Since it is very difficult to accurately predict hour-to-hour traffic conditions, then, transportation becomes yet another imponderable problem for filmmakers.

C) Scheduling: Setting aside budgeting and transportation, the imponderable problem *par excellence* in preparations is scheduling. The shooting schedule is the AD's primary responsibility, as I indicated in chapter 2, yet the AD can never know, in the present, all the factors that will lead onto the execution of any one shooting day in preparations, let alone his entire shooting schedule. Thus, the imponderability of scheduling is mediated by

¹⁰⁴ Indeed, production legworkers like Setohy can sometimes walk great distances instead of using the metro, the microbus or the taxi. Walking, in this case, is a choice made out of the necessity of assessing journey times with more accuracy, which is harder to do with more comfortable motorized transportation given the imponderability of hour-to-hour traffic. Knowing that Cairo is an unfriendly urban environment for pedestrians overall (Sims, 2010: 236-237), the relation between walking and journey times becomes even more evident.

various written means. According to Omar el-Zohairy, scheduling starts with a complete scenario breakdown indicating all times, locations, characters, props, and costumes in the film as well as a ‘sequential’ breakdown (*tatabo3*), indicating all times, locations, characters, and so on, arranged by scene. With these two sheets on his laptop, the AD in *Décor* got an overview of all logistical elements needed in the film, wherefrom he grouped these elements by location in order to craft a preliminary shooting schedule.

Since the conventional shooting day is twelve hours (although, inevitably, it is often extended in practice), Zohairy tried to fit as many scenes by day or by night as possible in the same location, while trying to keep all scenes in order within the same location. In this sense, Zohairy’s schedule strove to group all scenes on a given day in a single location, while striving to reduce the number of days spent on location in order to avoid paying extra rental and labor costs. Knowing that half-day shootings are a waste of money to the production team, because workers are paid for the whole day once the camera rolls in any case, Zohairy would group locations together on a single day, while trying to organize as few ‘displacements’ (*na2alat*, sing. *na2la*) as possible to avoid remaining stuck in traffic between two locations. Traffic concerns are equally important to set attendance times on each shooting day, because the AD needs to take into account not only the time taken by equipment cars, prop cars, or costume cars to the location, but also the expected time taken by all cast and crew members from their homes to the location.

Financial and logistical pressures are only part of the variables juggled by the AD, since he also needs to take into account the artistic crew members’ schedule on its own. While the non-artistic crew’s daily work is bound by the film project at hand, as Farghalli told me, the artistic crew may work on several projects at once. Well-known art directors like Mohammed Atia or Ali Hossam are notorious for working on multiple projects at once – they may well be preparing a television serial or a commercial while their movie is shot

under the auspices of the assistant decorator. This situation is inconvenient when the director insists on the art director's presence on set, as was the case with Tamer Mohsen and Ali Hossam in *The Cat and the Mouse*. Similarly, a cinematographer like Tarek Hefny can be contracted on a two-day commercial at the end of the initial shooting schedule, which may conflict with the actual shooting once the schedule is (inevitably in my experience) extended. These scheduling constraints are negotiated on a case-by-case basis, but they are never negotiated with executive crew members, who are immediately replaced when they do not fit the project's extensible schedule.

The only workers ever deemed irreplaceable by the production team are movie stars, especially once they become in continuity (*rakor*) after the shooting begins. As Grimaud remarks in Bollywood, 'the actor-who-plays [i.e. who is solicited in several film projects] is first and foremost a purveyor of dates – i.e. an agent in the configuration of the time of production' (2003: 307). Egyptian stars tend to have conflicting commitments with the shooting schedule in the TV serial production season preceding Ramadan, which means that the AD (in conjunction with the production team) needs to manage the actor's schedule in his own schedule and, in some cases, with the conflicting project. In *Décor*, we took two long pauses in the schedule because, in the first case, there was a conflicting commitment with a TV serial in which Horeya Farghaly was starring, and in the second case, the star had planned a holiday in Thailand. Needless to say, the production would not have halted had any other crew member booked a holiday in advance. Stars therefore exert significant influence over scheduling, among all elements juggled by the AD to negotiate conflicting commitments in scheduling (which, in many cases, are solved by replacing a cast/crew member).

The AD's balancing act is not strictly logistical, however, since it needs to take additional account of specific artistic demands. When I was assisting in the scheduling of

Poisonous Roses, the cinematographer Maged Nader would insist on shooting in the tannery towers at very specific hours in order to get a specific sunlight on the yellow gelatin peppering the rooftops of tannery workshops¹⁰⁵. These hours were carefully consigned by Hady Mahmoud, the AD at the time. In *Décor*, Zohairy regularly told me that Ahmad Abdalla would ask for more time to shoot certain ‘important’ takes or scenes because he needed to work with his actors a little more. For instance, when we shot the scenes where the protagonist Maha recovers in a hospital after a train accident, the set was much quieter than I had been used to seeing it. Zohairy and his assistants told me that it was a ‘heavy day’ (*yom t2il*), by which they presumably meant that the performance was especially important, since they involved scenes where Sharif and Mostafa visit Maha to try to convince her to choose between her two lives and loves. As it happens, the start of the shooting day was delayed by about two hours, and Zohairy justified this delay to the crew by the fact that actors needed time to prepare¹⁰⁶.

Overall, then, the AD’s schedule is, at every moment in preparations, an imponderable problem by virtue of the very many humans and nonhumans whose actions impact the shooting’s execution in the long run – from adjustments to the scenario and its breakdown, to the production’s logistics, to the artistic crew’s scheduling commitments, to their artistic demands. Section IV will examine the way in which this imponderability is mediated via various technological objects, but I now wish to elaborate over the more specific contingencies involved in executing a shooting day.

¹⁰⁵ Tanning workshops produce several animal-based products, including yellow gelatin, which is made by boiling the excess skin grated off the skins destined to become leather. The boiled extract is cooled in water basins, cut into wiggly slices, and arranged on very tall towers on the rooftop of tanning workshops to dry in the Cairo sun. The geometry of the towers filled with yellow gelatin and backed by the sun created interesting visual effects for Fawzi Saleh and his crew, and they sought to exploit it to the fullest.

¹⁰⁶ When unplanned, this kind of delay can be catastrophic to the AD’s schedule, yet Zohairy probably knew that he could catch up on additional scenes. Indeed, the scenes that ‘fall’ (*to2a3*) or cannot be shot on a given day have to be rescheduled, which can mean that the location has to be rented another day. With budget strains, however, rescheduling may well mean that certain scenes have to be canceled or altered in the scenario to accommodate another shooting location.

III. The Quandaries of Execution

In principle, logistical preparations are meant to exhaust all eventual issues on set. In practice, as I describe in this section, execution involves a great deal of imponderability to the crew members in charge. Preparations, however exhaustive, cannot take account of all courses of action leading onto the shooting's actualization. The seemingly indefinite logistics involved in executing a shooting day are perhaps better suggested with a raw example, so I reproduce the following excerpt from my field notes, originally written in French on June 7th of 2014:

Today is the first shooting day in [director] Tamer Mohsen's and [screenwriter] Wahid Hamed's movie, *Al-Qot wel-Far* [*The Cat and the Mouse*]. On the previous day, [the location manager] Setohy called me over the phone to tell me that we had a *tagammo*³ [meeting point] around 5 am at Kouki Park near the end of Faysal St. I told him OK, and we hung up. (...)

So I arrive at the meeting point (...) around 4:55 am. There is a microbus on the verge of leaving with [two production assistants] Mo Fathallah and 7ouda (as well as a few people that I don't know). I salute some people in the production team in turn: [production assistant] Adham, Setohy, [production manager] Tamer Fathi. When he sees me, Tamer smiles and says, '*Enta geit el-order?*' ['You came to the shooting?']. I smile back, and after kissing him, I say, '*Setohy eddani order*' ['Setohy gave me the shooting time']. He immediately answers with a smile, '*Ana hafsha7'oh delwa2ti!*' ['I'll kill him now']. I silently stand next to people in *entang* [production], along with Alaa (régie) not too far. Tamer, Setohy, and Adham are constantly on the phone, and the question they always ask is, '*Enta fein?*' ['Where are you?'] or '*Wselt fein?*' ['Where did you get?']. Tamer then checks with Adham where the *malabes* people [costume team] are, and Adham ensures that they are on their way (indeed, they arrive 10-15 minutes later). Tamer then asks Setohy where the video-assist crew is, and Setohy says that they will go directly to the *midan* [roundabout] near the location, and [I see him calling them to] explain the road over the phone.

Alaa (régie) is constantly over the phone with an actor (a general in the movie), but the actor's phone is off, and Alaa expresses his frustration out loud. He says that he called at 4:15 am to wake him up, and that he lives right next to Kouki Park (on Haram St.). The city's lights go dark around 5:15 am, when the dawn has not yet appeared. Around 5:30 am, Tamer Fathi brings me with Adham to the location, in his own car.

In Tamer's car, Adham receives phone calls from Amira (the assistant-stylist) on his brand new Samsung phone. She asks him to explain the road to the location every time (Adham asks where she is, and then he explains how she should go). (...) Tamer Fathi also receives a few phone calls; I guess they're about where different people are. When we arrive in the *midan* near the factory, Tamer explains to Adham how to go to the factory, then he guides a few cars and trucks behind him (including a car where [stylist] Nahed Nasrallah and her assistants are). [Indeed, a few cars and trucks seemed to have been waiting in the *midan* until a production member would guide them to the location]. (Navy Notebook #8, pp. 135-137)

This excerpt captures approximately two hours on the first shooting day in *The Cat and the Mouse*. I started with a brief note about a phone call that I received from Setohy, who was officially a location manager in this movie, at home. The call communicated important logistical information (where we would meet, at what time), but the fact that there was a phone call to begin with means that Setohy had planned on calling me. Setohy most probably did not call out of courtesy, but with the intention of contacting all crew members who would gather at the meeting point on the next day – something I have seen him do endless times in New Century's office, with a long handwritten list of contacts on the desk.

What seems most salient in the excerpt, beyond this initial call, is the number of calls made to some crew member or another on the shooting day itself. As I explained in chapter 4, there is a strong expectation to answer phone calls whenever a superior calls, or whenever 'work' is expected. This expectation is never more pressing than at the beginning of a shooting day, especially the *first* shooting day, where production workers are expected to 'set the tone' in terms of punctuality for the remainder of the shooting schedule. As Ahmad Fawzi Saleh told me before the first shooting day in *Poisonous Roses*, and as I was told by the experienced AD Safiy el-Din Mahmoud, the first day allows each crew member to size the extent to which punctuality will be enforced. If the day goes right on schedule, it is difficult to try and 'let go' for any crew member; if delays run wild, however, crew members can feel like they have a license to be late.

In this sense, when the *regiseir* Alaa tries to call one of his extras without getting an answer, he expresses exasperation not only because he fears that the extra's absence might delay the shooting (which the production team will in turn blame on him), but because the extra is expected to be on call at any time, especially at the beginning of a shooting day, when his physical presence is necessary to execute certain scenes. Calling is not restricted to ensuring the presence of all cast and crew members on set: it also extends to ensuring the presence of equipment, props, and costumes. When the production manager Fathi asks the location manager Setohy to call the video-assist crew, it is because he expects them to be present at the meeting point on time, and he wants to make sure that they will not occasion any delay in the equipment's presence, which may in turn cause a delay in the shooting day. This delay could have been compounded by the fact that the shooting took place in 6th of October City, on the outskirts of Cairo, and the video-assist crew may have become stuck in the commute traffic between their office in Giza and the location if they had come to the meeting point a little late. Thus, calling by phone is a safety measure to ensure that everyone and everything necessary to the shooting will make it on time to the set, which remains an imponderable outcome until everything and everyone *actually* makes it to the set.

Delaying (*ta25ir*) is the first and foremost problem of execution, both to the AD and the production team. The AD's major concern on set is to finish his daily call sheet (*order*), which is written based on his shooting schedule and adjusted based on the shooting's actual unfolding¹⁰⁷. Any major delay is considered a '*drop*', a failure in execution. A failed prop delivery to the location, a lost continuity item, an actor who does

¹⁰⁷ Zohairy made his daily call sheets on his Mac laptop. In Studio Misr, I saw Zohairy composing his call sheets in a Word document by copy-pasting 'rows' from his sequential table into a separate call sheet document (each row corresponding to a scene, where columns specified the location, characters, props/costumes, number of pages in the scenario, and so on). The costume script, Mariam el-Bagoury, made a separate call sheet for costumes (*order malabes*), which was given to the actors in order to coordinate the clothes that they needed to bring on set.

not show up to the shooting, a malfunctioning generator, a setting sun right before the last daylight scene – all these events can be considered ‘*drops*’. While they all add to the imponderability of executing a shooting day, they are not all the same. Farghalli made a useful distinction between a *drop qadari* and a *drop mehani* – a ‘fateful’ and a ‘professional’ drop. While this distinction is not explicitly held across the Egyptian film industry, it does seem like certain on-set events are deemed to be fateful, while others are deemed to be professional mistakes. Thus, delays occasioned by non-logistical reasons are considered unavoidable (e.g. an actor taking too much time to learn his lines in between takes, or rainfall causing an apartment with a porous roof to flood in *Poisonous Roses*). Delays that can be blamed on an executive crew member, by contrast, are taken to be serious professional mistakes and everything is done to remedy their recurrence, including firing inconstant crew members. For instance, the first shooting day in *The Cat and the Mouse* was well executed as the AD Hossam Ali told the line producer Farghalli and the production manager Tamer Fathi, but the only recurrent delay was provoked by the video-assist’s inability to make the monitor work when everything else was ready prior to a take. On the very next day, the production team had hired a new video-assist crew to avoid such delays¹⁰⁸.

Although delays are preferably avoided, they are by and large deemed to be unavoidable in any project. Once, I asked the general manager Badawy how much in advance he makes his shooting plans, and he answered that he only plans in two-week segments, since unexpected events (e.g. traffic, bureaucratic delays in permit-making, street protests) are likely to disrupt his plans beyond the two-week timescale. In addition to

¹⁰⁸ There are several reasons to avoid delays. There is, first, a financial reason: delaying a day’s programme may cause the production to pay an additional shooting day in the very same location. There are, second, artistic reasons, insofar as delaying a scene may cause the actors to lose concentration (in which case the director may ask to shoot an additional day), or it may cause the sunlight to go away (in which case the cinematographer may ask to shoot on another sunny day). Lastly, there is a general scheduling reason to avoid delays, since postponed scenes can disrupt a scheduled shooting block in a single location, and they may force the AD to completely change his ensuing plans.

these unexpected events, ordinary failures like the video-assist's inability to work, or crew members coming in late, or even a passerby interrupting the shooting recur enough to make delays a part of any project in my experience. Although some delays are unavoidable, then, the AD and the production team seek to minimize any and all 'drops' on a shooting day. Beyond ensuring that everyone arrives on time, all the production teams that I have seen in action oversee several logistical details necessary to the execution of a 'successful' shooting day, i.e. a day without delays. First, they secure parking spaces for all crew members and, crucially, the big equipment trucks (including the camera's van, the gaffer's truck, the grip's truck, and the generator needed to provide electricity to the lighting equipment). Second, they ensure that all equipment, extras, props, and costumes are transported in timely fashion to the location (prior to the shooting) and back to their storage space/companies (after shooting). Third, they secure a perimeter around the camera in external shooting to avoid unwanted pedestrians entering the camera's frame. Fourth, they ensure that all cast/crew members are fed/receive break money (*badalat*, sing. *badal*). Lastly, they ensure that the set is well kept and cleaned once all scenes are shot in a given location.

Each of these tasks was assigned to a specific crew member or a specialized sub-team in *Décor*. The location manager Ahmad Abdallah Abdel Halim or the production manager Setohy would negotiate parking spots with local 'parking agents' (*soyyas*, sing. *sayes*) prior to the shooting day. Mahmoud Abdallah ordered the production's cars and their movement. Khaled Labanita called in the 'break' food and distributed the substitute money. The location services workers Mondy and Sayyed cleaned the location every day. This division of tasks evidently depends on the size of the production team. In principle, all these tasks can be executed by a single legwork crew member: Edward Nabil, the production manager in *Poisonous Roses*, worked on his own in Hala Lotfy's *Coming forth*

by day (2012). The production team, in short, is expected to carry all the logistics of a shooting day on its shoulders, which is why the ‘*drop*’ is such a fit metaphor. This expectation can be generalized, in a sense, to all executive crew members, to the extent that they are expected to faultlessly carry out any and all artistic demands on set. Chapter 7 explores the consequences of this assignment of logistical responsibility to executive workers, both in releasing ‘artistic’ work from ‘technical’ strains and in reifying executive labor. What I wish to note, here, is the way in which the distinction between artistic and executive workers is underlined in two asymmetrical expectations concerning the execution of a shooting day: the expectation to be *available* and the expectation to be *faultless*.

The logic of availability is visible in the spatial organization of the set (see figure 4). While being ‘behind the scenes’ is a good way to relax on set, several executive crew members need to remain close enough to the camera to be ready whenever they are called upon to intervene. The lighting assistants need to remain available to displace spots after a take; the prop assistants need to remain available to clean given prop items; the make-up assistants need to remain available to brush any sweat off the actor’s face. In *Décor*, hierarchical superiors would call out loud (*endah*) specific names or entire teams to execute their attending tasks (e.g. ‘*eda2a*’ when a lighting technician is needed, or ‘*akseswar*’ when a prop assistant is needed). Moreover, they would berate workers who were not close enough to the camera whenever ‘called upon’, just like production legworkers were berated by Farghalli when they neglected to answer his phone calls¹⁰⁹. This expectation to remain ‘on call’ is nominally extended to artistic crew members, but whereas executive crew members are rigidly on call, artistic crew members have greater

¹⁰⁹ In chapter 4, I have described how legwork production crew members need to remain available by phone, an expectation which seems reinforced by Farghalli’s preference to call his assistants in person as opposed to sending text messages or emails. Farghalli thereby made sure that his directives were communicated in direct manner. Legworkers can pretend not to check or not to have received messages or emails, but they cannot pretend not to have heard his voice.

leeway in this regard, even though both may equally delay the shooting day. To give two examples, I have witnessed an actor/actress delaying the whole shooting day by 30 minutes because s/he did not want to come out of her lodge before the other star actors; on a separate occasion, I have seen a whole set grinding to a halt because the director and the AD went napping while the set was furnished and lit prior to a take.

This asymmetry between artistic and executive crew members in the expectation to be ‘on call’ can be observed in the expectation to be flawless. In a sense, artistic ‘mistakes’ are considered unavoidable. Several artistic workers have room to endlessly reiterate certain operations without being sanctioned. Exemplary cases are the actor who repeats a take because he cannot learn his lines well enough; the director who asks to repeat a take until he gets ‘exactly’ what he has in mind; or the cinematographer who keeps changing his lighting in order to get the ‘perfect’ image. I have regularly heard executive crew members sighing in *Décor* whenever they had to wait because Ahmad Abdalla brought an artistic adjustment to a take that was taken over five times. As I will explain in chapter 6, what may be an important adjustment to the director or the cinematographer can be, to the executive crew member, a sign of inability to ‘know what one is doing’ (*ye3raf howwa bye3mel eih*), which is interpreted as a matter of artistic skill (*shatara*). Thus, the prop assistant Mostafa Seyaha told me that the art director Nihal Farouk was too ‘weak’ (*da3ifa*) in her job because she changed her mind too much, a claim that he evidenced by reference to a room which he had to furnish anew once Farouk saw and disliked the initial result. Notice that Seyaha did not expressly disagree with Farouk, since as an executive crew member, he can only but execute what the artistic worker Farouk wants. Yet, he still judged his superior’s skill: he contrasted the low-skill crew in *Décor* with the crew of the director Sharif Arafa, who is known to work fast, with few breaks in between takes. This

situation was taken to index Arafa's skill (*shatara*) by contrast with Ahmad Abdalla and his crew in Seyaha's view.

In contrast with artistic delays, then, a camera technician taking too much time to load a battery, or a grip unable to straighten a track in a satisfactory time, or a video-assist unable to get an image on the director's monitor all constitute 'mistakes' (*8alatat*, sing. *8alta*). These mistakes can constitute grounds for reprimand by hierarchical superiors. Assigning blame is a regular exercise in this sense. For example, in *The Cat and the Mouse*, the camera technicians did not bring a 'clip-on'¹¹⁰ on the second day of shooting. When the chief camera technician Hamada alerted Farghalli to the missing item, the production manager Tamer Fathi quickly dispatched a production car to the camera rental office to fetch the item. Soon thereafter, the focus puller came into the production room: he told Farghalli that he needs to receive the call sheet in order to know what equipment he needs on which days and instruct his technicians accordingly. Farghalli conceded the point, and when Hamada came to apologize for not having brought the clip-on, he added that he was never told by the edit-camera Yasser Zanita to bring the item (since Farghalli had communicated the information to Zanita on the previous day). In the end, the missing piece of equipment arrived on set, but the quick exchanges between Farghalli, Hamada, and the focus puller helped establish that the production team was to blame in this case. The information, indeed, had not been communicated to the appropriate crew member – i.e., the focus puller and, by extension, the chief camera technician. Although the production team may have reminded someone in the cinematography crew orally, and although the information could reasonably have reached its destination, the blame still goes to the production team, which has not properly distributed the call sheet – the ultimate arbiter in this case.

¹¹⁰ The 'clip-on' is a piece of equipment necessary to assemble the steadicam, a rig allowing the cameraman to latch the camera onto his body, thereby making it possible to move around a set while maintaining the camera frame relatively stable.

The call sheet, a written mediator, makes an overall imponderable outcome – i.e. who will bring what equipment on set – contingent on the crew members assigned to execute this task – i.e. the focus puller with the call sheet provided by the production team. However, since the focus puller did not have the order, he could not follow-up on executing the task. The fact that Farghalli did not berate anyone on his team or on other teams and the fact that one of his production cars (as opposed to the camera van) was dispatched to the company both indicate that he recognized his responsibility in this minor incident, although he may not explicitly acknowledge it. Being faultless, in this sense, is not just about trying to avoid mistakes on set, but also about trying to avoid being held responsible for mistakes by repairing them as soon as they happen, which is a concern to all executive crew members as opposed to artistic ones.

What remains most important to executive crew members, then, is to avoid any ‘drop’. These include, to add more examples to the list above, not managing to get enough space to park the generator; forgetting to bring the break meal to a crew member (especially a hierarchically superior one); forgetting to pack all props while leaving a location; and so on. Being responsible for a ‘drop’ can lead to being fired without compensation, and it is a matter of professional pride to executive crew members to avoid these mistakes. Keeping things ‘under control’ (*ta7t el-saytara*), or being ‘in control’ (*msaytar*), are highly prized traits in executive jobs on set, particularly to the AD and the production team. Given the constantly looming threat of a ‘drop’, however, execution remains a contingent exercise to executive crew members, who not only have to deal with not knowing all logistical courses of action leading onto the shooting day in preparations, but also have to contend with logistical contingencies on the shooting day, which highlight the added weight of expectations to be constantly available and faultless. These expectations, in addition to the various mediators summoned by executive crew members

in their daily work, are crucial to understanding how executive workers mediate the imponderability of shooting, as I explore in the next section.

IV. Reserves and Written Mediators

What should transpire from sections II and III is that preparing and executing a shooting day presents a set of imponderable issues like budgeting, transportation, scheduling, execution delays, and artistic decision-making. Imponderability is partially mediated, in all cases, by the fact that only executive workers – above all, the production team and the direction team – are in charge of these issues. The centralization of logistical decision-making in the hands of executive workers is precisely what allows artistic workers to concentrate on the ‘artistic’ aspects of film production. They do not have to worry about logistics, which are delegated to specific workers in the industry’s complex division of labor. The rigid hierarchy and division of tasks maintained by executive crew members are central in making the inevitable imponderability of preparations and shooting more contingent on/to specific crew members, especially in a temporary organization like a film set (see Bechky’s work on American movie sets for a similar argument, 2006).

In short, the labor hierarchies described in chapter 2, combined with the accepted operational sequence described in chapter 3, serve as important assumptions in mediating the complex logistics of filmmaking. I would add that technological objects like paper, phones, and laptops play an important role in this mediation. This role, as I have detailed in the introduction, is insufficiently described in the existing literature on media anthropology. Earlier in this chapter, I have briefly hinted at how each major logistical issue in film production relies on various mediators, summoned to work by various

reserves. The flow of cash is recorded by the accountant on paper; transportation missions are coordinated via mobile phones; the shooting schedule relies on a variety of scenario breakdowns on computer or on paper. These suggestions, on their own, are insufficient to give a sense of these reserves' importance. They give the impression, indeed, that the anthropologically relevant elements in film logistics only occur between people (the accountant and the crew members; the production team and the direction team), while technological objects serve as a mere support to these higher-order interactions. I would argue that technological objects are important precisely because they inscribe a variety of written mediators committing each crew member's attention to an imponderable incoming future. Reserves make present, to executive crew members, the incoming future of preparing or executing a shooting day. They do not allow filmmakers to have full control over their incoming future, but they condition its conception enough to make its imponderability, in some respects, contingent.

Accounting paperwork offers a good example in this sense. As I have suggested, cash transactions are not officially recorded unless they subsist in intermediary paperwork – either in receipts (*fawatir*, sing. *fatura*), in summary sheets (*7awafez*, sing. *7afza*), or in accounting books. There is no guaranteeing that all transactions are actually inscribed on paper or even on computer, and I have heard many stories about 'theft' occurring by taking money without leaving any physical trace or, better yet, claiming that a transaction was made for a different sum than is inscribed in the books. Ganti recounts a vignette in Bollywood where a production crew member filed all cash transactions in Excel, only to be told by the accountant that he needs to destroy the computer file (and all floppy disks on which it was saved) because he did not want the fiscal authorities to overtax the project (2012: 225). Ganti takes this moment as evidence that the 'work culture' in Bollywood is highly oral, to the point where even inscribing monetary transactions is suspicious. This

fear of overbearing taxation has been just as important throughout the history of commercial cinema in Egypt (see Flibbert, 2001: 86).

However, although today's Egyptian film industry is just as 'oral' as what Ganti describes, in the sense that *viva voce* conversation is the standard means through which contracts are negotiated and monetary information is circulated, the industry produces copious amounts of accounting paperwork, whether or not this paperwork is accurate. What is interesting is the way in which paper (or digitized versions of printed paper) acts both as a record of transactions, whether real or fictional, *and* as a support to evaluate how much money can still be spent according to the budget. These proximate evaluations are not open to all crew members. From my experience in *Décor* and in *Poisonous Roses*, they take place between the accountant and the line producer, and they are renewed with every week's budget adjustments. In these calculations, the paper receipt 'in itself', as an object inscribing transactions, is not what counts most. It is, rather, its role as written mediator, instantiating the relation between what has been spent and what remains to be spent. The accountant Mohammed Hosny and the line producer Farghalli consulted 'aggregate' paperwork to this end. Farghalli's budget in *Décor*, to take a concrete example, detailed what amounts had been spent on all items in the project while leaving room to estimate what could have been spent later. Although they can never solve the overall imponderability of movie expenses in preparations, these kinds of judgments concerning near- to far-future expenses break down budgeting into more or less contingent decisions, mediated via accounting paperwork.

The written mediators employed in scheduling play a similar role, which can be better illustrated with a direct example from *Décor*. Nearly a month before shooting, I was sitting with the AD Zohairy and the general manager Badawy in New Century. Badawy asked Zohairy whether he had a shooting schedule in mind. Zohairy took out his location

breakdown from his bag, and he started telling Badawy about a shooting schedule orally, using his breakdown sheet as a guide to the locations that had been chosen and the ones that still needed to be found. Badawy took notes on what Zohairy was saying as the AD insisted several times that it was a *tentative* schedule. Nonetheless, Zohairy said that he would start with 3-4 shooting days in Sharif and Maha's apartment, then 3-4 shooting days in Studio Misr, followed by 7-8 days in Mostafa and Maha's apartment. He said that in between these shooting blocks the director Ahmad Abdalla would need 3-4 day breaks to edit his material. Badawy resisted the idea: he tried to convince Zohairy to get Abdalla's editing breaks after longer shooting blocks, adding that Zohairy needed to be wary because the star actress Horeya Farghaly had signed a movie with Sobky at the beginning of December, and the star actor Khaled Abol Naga was signed to act in another New Century production right after *Décor*. Badawy ended the conversation by saying that New Century is not an 'independent' company, which means that there is a fast turnover of capital (*dawret ra2s mal*) and the film needs to be finished in timely fashion.

A few days later, Zohairy had made a calendar schedule in a Word document and sent it by email to all concerned crew members – including Farghalli, Abdalla, and the heads of each artistic team. When the art director Asem Ali next came into New Century's office, Farghalli asked him whether he had any comments on Zohairy's schedule. Ali took out his computer, opened his emails, and he looked at the calendar-like schedule. The art director asked why set building in Studio Misr is inserted in between shooting days in Sharif's and Mostafa's apartments, and Farghalli said that Ahmad Abdalla wants it this way. Ali uttered a brief 'OK' and added that on the 17th of January, he only has one day to completely change the set in Sharif's apartment, intimating that it was insufficient. Farghalli told him that it is the only available time, because the star actor Khaled Abol Naga has a long trip between the 18th and the 26th of January. Farghalli said that in

counterpart, Ali will have plenty of time to build Mostafa and Maha's apartment, because Horeya Farghaly is going to be away on that week. Farghalli asked Ali if he could estimate how much time it would take to build the set in Studio Misr, and the art director answered that it all depends on the location of Mostafa and Maha's apartment (because they had not finished scouting yet).

This example makes clear, again, the imponderability involved in making a shooting schedule, and how it is mediated by specific crew members inserted in a specific division of tasks. Thus, the general manager presses the AD to fit his shooting schedule in fewer days given financial concerns; the AD communicates his schedule to the line producer; the line producer follows up on each artistic crew member's demands (e.g. Asem Ali's demand to get more time to change the set). In all these discussions, technological objects like paper or computers are not relevant in themselves, in their 'objectness'. They are reserves summoned by specific workers to reveal written mediators (e.g. breakdown sheets, schedule sheets) and, in turn, they summon the worker's anticipation, in the present, of all logistical needs necessary to execute a specific operation in preparations or shooting. In so doing, the imponderable problem of scheduling a shooting day is partially broken down into a series of contingent decisions, with the help of reserves. In this sense, when Zohairy is asked to orally recite his tentative shooting schedule in *Décor*, he takes out a printed location breakdown and refers to the main locations in order to estimate which locations are still needed in scouting, which intermediary operations are needed before shooting, and crucially, how many days each step will take before the shooting schedule gets to be executed. Likewise, when Ali is asked by Farghalli to give his comments on the schedule, he takes out his computer and looks at the proposed calendar in order to know which set building responsibilities will rest on his shoulders and how much time he will have to execute each operation in turn (e.g. designing and building sets in

Studio Misr between shooting days in two different apartments). Without *causing* concerned crew members to think or act in a given way, the paper and the computer act as future-oriented *aides-mémoire* on a specific set of decisions to be made by specific workers.

In preparations, reserves stand as mediators between present transactions and eventual (shooting) operations; in shooting, by contrast, they seem to have a more immediate use. This was evident with the use of mobile phones by production workers on the first shooting day in *The Cat and the Mouse*, and it was clear when the ‘clip-on’ was not brought on location and the production manager Fathi repaired the mistake by ordering a car to the camera company by phone. Calling upon workers to execute a task, be it in *viva voce* or by phone, can ensure that these responsibilities are executed immediately. What I would argue, here, is that the ‘mediate’ vs. ‘immediate’ character of written and oral mediators (e.g. a call sheet as opposed to a phone call) does not alter their reserve-like character. Both written and oral mediators instantiate, in the present, certain near-/far-future imperatives to the executive crew members, who stand to be constantly preoccupied by a future-orientation towards imponderable or contingent logistics. The difference between preparations and shooting, in this case, is one of timescales. While the timescale of preparations tends to be longer, the timescale of shooting tends to be shorter.

Moreover, the technological objects used in preparing and executing a shooting day act in complementary fashion as reserves. They may be endowed with a different set of affordances, but they are joined in instantiating (future) logistical needs to the (present) executive crew members. This is clearly the case when these reserves summon written mediators like scenario breakdowns. In preparations, breakdowns instantiate a list of all elements to be brought on a far-future location; when the shooting is upon executive workers, breakdowns instantiate the more urgent timescale of the *physical presence* of all

elements on set. In short, they act as a checklist as opposed to a to-do list. As Setohy once put it, everything in production work needs to be done ‘*bel-wara2a wel-2alam*’ (by paper and pencil), which is both a physical metaphor of the production’s work as well as a normative statement about this work’s methodical nature. This expression exemplifies ‘boundary-work’ in Ganti’s sense: indeed, the pencil-pushing worker is deemed a better normative model than the straw-man ‘purely oral’ colleague¹¹¹. Like the bureaucrat, the production crew member in this expression is expected to execute whatever is on paper: the paper thereby stands as a literal and figurative mediator of (future) logistical needs. On their own, however, technological objects cannot *compel* preparations or execution in any way. It is only within the context of an accepted division of labor between executive and artistic crew members, where the former execute certain operations with the expectation of being constantly available and faultless, that the reserve can summon workers to mediate imponderable logistics. This is why, I argue, technological objects play a crucial role in filmmaking.

V. Technology, Work, and the Incoming Future

This chapter has described the various logistical issues confronted by executive crew members in preparing and executing a shooting day. I have argued that these issues combine to make logistics imponderable to the executive crew members in charge in sections II and III, and I have explained in section IV how this imponderability is mediated via accepted labor hierarchies, production operations, and reserves acting as *proxies*

¹¹¹ In fact, one way in which Egyptian filmmakers regularly articulate the distinction between their own industry and ‘foreign’ industries is precisely by saying that foreigners only work *bel-wara2a wel-2alam*, as efficient automatons, while Egypt remains an ‘oral’ industry, much in the same way as Bollywood (Ganti, 2012: 222-225). What I am trying to show, in part, is that this ideology of pure orality masks the proliferation of technological objects – phones, paper, and laptops – in the work of Egyptian film production.

between near-future and far-future logistical needs. These reserves are neither unique to Egypt nor to the film industry. In Boyer's ethnography of digital journalism in Germany (2013), the author writes about his definite sense of kinship with the 'screenwork' of journalists, since his own anthropological practice could be described as such. I have also felt this kinship between my own work and the work of preparing/executing a shooting day in Egypt. First, both activities are oriented towards an imponderable incoming future: in one case, towards the writing of a thesis; in the other, towards the recording of audiovisual material. Second, while both problems are imponderable in the present, their mediation relies on certain assumptions concerning the role of 'researcher' as opposed to 'executive worker'; the operational sequence leading onto a thesis as opposed to a film; as well as the different technological objects summoning different written mediators between the present and the incoming future. This affinity is not unique to the digital era. I am sure that yesteryear's executive workers made as many paper letters, to-do lists, and call sheets as yesteryear's ethnographers made handwritten notes. The point is not that digital devices somehow make logistical work 'better' or 'faster'. Rather, these devices summon, in the present, the future of a specific socio-technical sequence to a specific set of workers engaged in mediating its imponderability.

This argument can be linked to a broader issue in the sociology and anthropology of work – namely, the relation between technological devices and the experience of everyday work in late capitalist societies. The intimate link between technology and work has been noted since Thompson's classical essay on 'Time, Work-Discipline, and Industrial Capitalism' (2009 [1964]). Tracing the emergence of machine-driven time in the early days of industrial capitalism in England, Thompson convincingly argues that early industrial workers were gradually habituated to a new experience of work thanks, in part, to new timing technologies. By contrast with task-oriented time, which was concomitant to

‘natural’ cycles (e.g. the harvest, the tides), machine-time offered accurate, objective measurements to synchronize manufacturing labor and thereby determine the price of wage workers. Of course, one should not assume that modern technology inevitably leads to identical changes in time-concepts across capitalist settings (see, in the Egyptian case, Barak’s history of the development of modern time in tune with the rise of new modes of transportation and communication in the colonial era, 2013). One can still note, in line with Thompson, that technological change – like the one that brought digital technologies to be ubiquitous in contemporary Cairo – can conceivably affect the spatiotemporal experience of work in capitalist settings.

This experience has been extensively examined in terms of a ‘home vs. work’ division. In his pioneering book on *Television*, Williams noted that broadcasting technologies have emerged in a context where ‘modern urban industrial living’ was governed by ‘two apparently paradoxical yet deeply connected tendencies’ – ‘on the one hand mobility [to work], on the other hand the more apparently self-sufficient family home’ (2005: 18). In Nippert-Eng’s words, ‘The normative expectations of a segmented home and work experience have resulted from the separation of the values, activities, social functions, and people of home and work into separate spatiotemporal locations. Throughout the nineteenth and twentieth century in the United States, “work” and “home” became increasingly distinct, mentally and physically’ (2010: 18). This is not a most productive way of analyzing the daily experience of Egyptian filmmakers, or in any flexible line of work, where ‘home’ and ‘work’ are not opposite poles in a continuum as Nippert-Eng contends (2010: 5). In this context, digital devices inform working experience in a way which was most closely articulated by Ladner’s short study of the use of mobile technologies in a Canadian interactive agency (2008). As she put it,

Mobile technologies present a confounding development in one of the defining debates in the study of work: the division between work time and private time. The use of immobile technologies, from factory machines to desktop computers, has contributed to the spatial centralization of work on the one hand and to firm divisions between work and home on the other. But with the widespread adoption of cellular phones, laptop computers, wireless Internet, and mobile email devices, this spatial rigidity has broken down, complicating a central tenet implicit in most employment relationships: the right of workers to restrict workplace or management access during private time. (Ladner, 2008: 466)

Through numerous interviews with agency workers, Ladner shows how mobile digital technologies (e.g. mobile phones, laptops) come to not only signify the interpenetration between ‘home’ and ‘work’ as experiential realms, but to physically blur the boundary between both by instantiating the potential to be working at home or entertained at work¹¹². I have reservations about Ladner’s grand narrative, tracing a linear passage between ‘immobile’ and ‘mobile’ technologies. However, I would argue that technological devices still shape everyday working experience in Egyptian film production by their ability to summon, in the present, both near- and far-futures. This future-orientation is not specific to the preparation or execution of film shooting in Egypt, or even to the imponderable problems that I will discuss in coming chapters – i.e. how ‘the film’ is to be visualized and how ‘the audience’ is to be imagined. Still, I would argue that technological objects modify the filmmaker’s conception of his work to the extent that they involve, in practice, this capacity to project oneself in an incoming future whether in planning cash flows, anticipating Cairo’s traffic, or managing unavoidable ‘*drops*’.

A reflexive note can perhaps serve to illustrate this argument, taking inspiration in Pandian’s recent reflection on the ‘time of anthropology’ – i.e. ‘the temporal horizons of

¹¹² Here, one can turn to the management literature on instant messages, phone calls, or email notifications as working ‘interruptions’ (Fisher, 1998; Speier & al., 1999; Jett & George, 2003; Jackson & al., 2003). This research is supported by literature in human-computer interaction (see MacFarlane, 2002; MacFarlane & Latorella, 2002) and experimental psychology (see Gillie & Broadbent, 1989), where interruptions are conceived as in-built distractions on screen (e.g. pop-ups, emails) or in the employee’s perceptual environment (e.g. noise, chatting workers). The core assumption in this literature is that workers evolve in an office-like setting, with a computer in front of their eyes, constantly concentrated on a ‘primary task’ until they are, by misfortune, interrupted. Needless to say that I wish to situate Egyptian filmmakers in a much wider context, where their working experiences can make them (or not) concentrate on work, even beyond the traditional workspace.

our own work and thought, as they unfurl in our relations with others and in the distance we assume to ourselves' (2010: 549). When I wrote down the field notes quoted at the beginning of section III, on June 7th of 2014, I noted on the opposing page of my notebook, 'If it is not evident enough, the *tagammo3* [meeting point] at the beginning of the day is a clear example of the work of coordination accomplished by phone'. When I wrote it down, in other words, I had in mind a thesis chapter about the logistical coordination of a shooting day, and I wanted to highlight to my (future) writing self how these notes could be relevant to this chapter. When I started writing, six months later, I recalled the vignette quoted in section III. When I came to copy it on my computer, I saw the little note just quoted in the margins. While in the field, the marginal note that I had made instantiated a record (i.e. what I had witnessed on June 7th of 2014) geared towards a future task (i.e. writing this chapter). Right now, this note is the record of a past intention to write this chapter and, when it has been transcribed above, it is marshalled as a piece of evidence in making my argument.

The notebook and the computer, here, inscribe two orientations towards the near-/far-future of an extended socio-technical process. Of course, writing a thesis in Oxford involves a vastly different division of labor and operational sequence in comparison to making commercial films in Egypt. Without expanding on these evident differences, I am struck by the way in which my notebook/computer act as reserves in much the same way as handwritten to-do lists in Egyptian film production. In the socio-technical process of writing a thesis, I resort to various technological contraptions to summon written notes while being summoned to write this chapter (without forgetting that the whole process occurs in a specific institutional context located in a different late capitalist society). What remains comparable, to my mind, is the way in which reserves come to inform everyday working experience whether in writing a thesis or making a movie. To be sure, I contend

with different imponderable problems than my interlocutors in Cairo – e.g. what will this chapter look like vs. will everyone make it on location to October City. Moreover, I use different assumptions and mediators to mediate these problems – e.g. handwritten ‘notes-to-self’ vs. to-do lists of phone calls. Nevertheless, the situation whereby we are made to think about incoming futures in our respective projects, via various technological objects acting as reserves, is common to our working experiences. This commonality, I would argue, is central to the way in which digital technologies affect the experience of work in late capitalist societies. Beyond a grand historical passage between ‘immobile’ and ‘mobile’ technologies, it is precisely the ability of digital technologies to summon specific incoming futures that captures, to my mind, the way in which workers experience their day-to-day work in long-term production processes.

Chapter 6

Visualizing the Film

I. 'What Does It Look Like?'

In the autumn of 2013, I was working on my field notes at New Century's office when the production manager Setohy came in exhausted. I asked him where he had been all day. He said that he went on a scouting mission at the district attorney's office (*neyaba*) in Qasr el- Nil, but the police officers guarding the office would not allow him to photograph the building unless he received special permission from the district attorney (*el-na2eb el-3am*). Around sunset on the same day, the line producer Ahmed Farghalli serenely walked into the office and started gathering scouting pictures on his MacBook from all production crew members. Setohy gave his camera's memory card to Farghalli, but there were no photos of the *neyaba*. Farghalli looked towards him and asked, 'Why didn't you scout the office?' Setohy told him the whole story, to which Farghalli immediately replied, a little heatedly, 'You couldn't even steal a tiny little picture?? I just wanted the external appearance (*5argi*) of the office!' Setohy justified himself by saying that he did not feel like he could take any photos, given the guards' presence, so Farghalli sighed and asked, 'What does it look like?' The answer was an oral-cum-gestural evocation of the building's yellow color; its bulky, rectangular shape; its architectural style, similar to other *neyabas* in Cairo. Farghalli seemed somewhat satisfied with the answer, but he still asked Setohy to photograph the office on the next day, which he dutifully did, as he was able to steal a photo of the *neyaba*'s external appearance on his way.

This vignette illustrates an absence, more specifically the absence of a scouting picture, a central visual mediator in the work of artistic crew members when they try to estimate what a shooting location will look like in the film. Standing in the preparations of *Décor*, no one – not even the director – knew what the final film image would be, given the wide variety of factors standing between the current film-in-the-making and the eventual ‘film’. These factors are logistical in part, yet the division of labor between artistic and executive workers allows artistic crew members to offload all logistical problems in visualization onto the executive crew, as I detailed in chapter 5. In the case of scouting, executive workers like Farghalli and Setohy were in charge of physically gathering scouting pictures, even though artistic decisions over the location remained in the hands of Ahmad Abdalla and his crew. Trying to visualize the film’s image, then, is an imponderable problem specific to artistic crew members, and its mediation relies on the industry’s division of labor, its operational sequence and, crucially, various reserves summoning visual mediators. These mediators serve to visualize a particular aspect of the final film, yet they are never part of the film *per se*. Scouting pictures like the one eventually taken by Setohy, costume-fitting pictures, printed set designs, color tests, casting videos, video-assist recordings, unwanted takes in editing, sound-editing and mixing ‘*references*’ are all visual mediators in this sense.

Images are not the only mediators used throughout the process of film production, as I have described in chapter 4. One may cite the scenario, the continuity script supervisor’s notes, shooting reports, and the editor’s notes among many artifacts with a comparable role in mediating between the present and the incoming future of film production. For the sake of brevity, however, I center my analysis on *visual* mediators in this chapter, with the understanding that other documents can mediate between the present and the future of filmmaking in a similar manner. In so doing, I am aware that I eschew a

discussion of film sound, which involves a great deal of anticipatory work by sound workers, as I have briefly described in chapters 3 and 4. The film's sound, much like its image, goes through a series of operations from on-set recording, to sound editing, to soundtrack composition, to the final mix, being constantly reworked by the sound engineer, the composer, and the mixer through various aural mediators (e.g. microphones, speakers). What I find interesting, however, is the way in which even sound work is based, in its technical execution, on visual mediators like the image '*reference*' through which sound is synchronized with the image in postproduction. In this sense, I include little discussion about sound *per se*, but I want to argue that visual mediators permeate the work of most artistic crew members on a film project.

As I argue below, Farghalli's initial question – 'what does it look like?' – captures the main way in which filmmakers mediate the imponderability involved in visualizing the film – that is, by trying to foresee what it will look like with a literal, physical image of its final form and composition (e.g. how actors look on screen, how shots are composed, how shots are edited, and so on). This imaginative process is often seen to exist inside the director's mind: as Ganti remarks, 'All of the directors I met asserted that they had their films "running in their heads," discussing them in very visual terms, commonly describing onscreen action in relation to camera angles and movements' (2012: 223-224). In line with anthropologists stressing the materiality of images (Pinney, 2001, 2004; Edwards, 2002; Edwards & Hart, 2004; Morton & Edwards, 2006), I will argue in section IV that technological objects do not serve as inert physical supports to the artist's mind in her effort to visualize the film, but anchor artistic creation in a generative way. In addition to the accepted division of labor between artistic and executive crew members and the accepted socio-technical process of film production, technological objects are crucial in summoning visual mediators, acting as a central link between the present and the incoming

future of ‘the film’. At any point in this mediation, whatever will be ‘the film’ remains an imponderable potentiality, which is made concrete by filmmakers through their situated imaginings, their conversations, and a wide array of visual mediators. Thus, an imponderable problem to the individual filmmaker becomes a series of more or less contingent tasks assigned to specific workers in an artistic division of labor.

To sustain this argument, section II starts by explaining the way in which Egyptian artistic workers approach visual mediators according to their technical skill and their authority within the crew. Section III presents case studies from the scouting operation in *Décor* and *Poisonous Roses* to illustrate the argument, although I would stake that it could be illustrated with any visual mediator in film production. As I argue in section IV, a materialist anthropology of images can be extended beyond immediate embodied experiences to the embodied experience of the image’s incoming future insofar as visual mediators have an ability to reveal, at once, some aspect of the film product and a variety of interpretations emerging in its production process. Since I concentrate on the intricacies of everyday artistic decisions in *Décor* and *Poisonous Roses*, those who seek to contextualize each film’s storyline can consult section V in introduction. To concentrate on the socio-technical activity invested in mediating the imponderability involved in the film’s creation, I will underplay narrative detail in order to stress considerations of skill, authority, and grounded technological use.

II. Skill, Authority, and Visual Mediators

Visualizing the film is, partly, a matter of skill. The Egyptian word for skill, *shatara*, is a generic term. It implies both a sense of ‘being good at something’ and ‘doing things right’,

i.e., it involves a technical as well as a normative meaning. When a pupil is said to display *shatara*, it implies that he is good at school *and* conforming to norms of appropriate conduct at school. In the Egyptian film industry, however, the word is rarely used in its normative sense. When two filmmakers talk about a third one's *shatara*, or another one intervenes in the conversation to dispute the previous claim, the evidence invoked is someone's past training or someone's past working experiences. To give a concrete example, I have heard on two separate occasions that Ali Hossam, the well-known art director who worked on *The Cat and the Mouse* (dir. Tamer Mohsen, 2015), is skillful (*shater*). One time, the art director Nihal Farouk sustained the point by invoking Hossam's well-made set designs in the action comedy *La Tarago3 wa la Esteslam* (*No Withdrawal, No Surrender*, 2010), where she worked with him as an assistant decorator. Another time, Hossam's then assistant Sharif Nabil agreed that he was skillful because he was trained by Onsi Abu Seif, widely recognized as Egypt's greatest living art director (partly because of his own training, incidentally, at the hands of the legendary art director Chadi Abdel Salam).

While concrete technical skills are explicitly discussed in the case of a key grip's manipulation of gripping equipment or a star's acting performance (*ada2*), the ability to visualize what a film will eventually look like is never articulated in the language of *shatara*, except in the case of directors. The director is deemed to be the only crew member with a complete 'vision' (*ro2ia*) of the film, and his *shatara* consists precisely in his ability to materialize his vision in the film product¹¹³. The term '*ro2ia*' is as ambiguous

¹¹³ The only dissension to this otherwise consensual opinion was, in my experience, articulated by directors themselves. Ahmad Abdalla, for instance, told me that the film's overall vision is collaboratively fashioned by his artistic crew, while the venerable Daoud Abdel Sayyed argued that he (as a director) has no visual idea of the film, which is crafted by his cinematographer and his art director, although he has a philosophical 'vision' of what he wants to present to his audience. Disagreements over the director's overall vision are rare among artistic crew members, since the director is most likely *not* to hire an artistic worker with whom he cannot agree in principle. However, in circumstances where a director is forced to work with a particular crew member, as when a star is imposed by a production company, artistic disagreements over a director's vision can occur and lead to clashes on set. These clashes involve personal disagreements rather

as the English term ‘vision’: it can imply both a concrete envisionment of physical images as well as an abstract ideational project. In the industry’s everyday vocabulary, *ro2ia* implies the latter meaning: it is a capacity to ‘see’ the film as an ideational whole¹¹⁴. The young director Ahmad Fawzi Saleh, to give a concrete example, sought to express a Marxist vision in *Poisonous Roses*. He identified as a Marxist and has read a great deal of Marxist literature, in addition to having been involved with many Egyptian Marxist groups and identifying with working-class struggles (given his own working-class background, as he suggested). Clearly, this is not an exhaustive summary of Fawzi’s personality, yet it objectifies certain precepts which, in his view, constitute a ‘vision’ to be expressed in his movie. The degree to which this vision is grossly represented or subtly infused in the scenario has varied, as evinced by our screenwriting sessions where we debated whether Taheya’s class struggle was visible enough or not (see chapter 3). Yet, there is a sense in which Fawzi’s Marxist views inform his practice – hence, his vested interest in the tanneries district and its workers; his attention to the domestic life of Taheya’s working-class family; his interest in everyday struggles between Taheya and Egyptian bourgeois society.

Evidently, not all directors adhere to a nameable ideology – some even make it a point to not be categorized in this way. Still, a director like Ahmad Abdalla, who seeks to evade any attempt at classification, wanted to tell the ‘untold stories’ of the Egyptian revolution in his earlier film *Farsh w-8ata (Rags and Tatters, 2013)*. The ‘vision’

than an overt challenge to the principle that the director should be the sole authority over artistic matters. One could evidently relate numerous stories where lower-end crew members mock, dismiss, or disagree with a director’s ‘vision’, but this resistance has no direct incidence on the final film’s aesthetic appearance, which is ultimately submitted to the director’s authority.

¹¹⁴ I initially heard the term used by the prominent director Daoud Abdel Sayyed, who argued that direction is first and foremost a matter of communicating a certain human *ro2ia* in a film. Abdel Sayyed formulated this reflection in a formal interview held in the cafeteria next to the Supreme Council of Culture in Cairo – an appropriate setting to express such an intellectualist opinion. When I asked artistic crew members, subsequently, whether they had any such ‘vision’ to express in their movies, they would rarely be able to articulate it or indeed acknowledge it. Still, I believe that the term ‘vision’ is a good way to describe the ideological underpinnings of the artistic decisions made by the directors with whom I have interacted closely.

embodied in this narrative portraying the escape of a prisoner during the 18 days of the 2011 revolution is closer to a liberal humanist one. In this largely silent movie, great attention is given to the prisoner's plight and his 'simply human' contact with various characters (e.g. his sister, his mother, a dying prisoner, the prisoner's wife). The way in which this *ro2ia* informs the narrative is evident given the various imaginable directions in which a similar story may have been told (e.g. with a moralizing disapproval of the prisoner, or a glorification of his working-class roots). In *Décor*, likewise, Abdalla sought to present the humanizing story of life-changing choices made by a middle-class woman in modern-day Egypt, whose consequences are never 'black-and-white', as the film image itself was.

This kind of vision is not instilled in the film by virtue of a genial imaginative effort, but more centrally, by virtue of the director's privileged position in the industry's hierarchy of artistic authority. After all, Fawzi and Abdalla might not actually see the whole movie in their heads, but given that all crew members believe that they can see it, then all their concrete, real-time decisions are taken to be manifestations of an overall vision, which is materialized in the film, thereby enacting the director's 'vision' as a self-fulfilling prophecy. Indeed, Fawzi would regularly dispute the common notion that the director 'knows what he is doing at all times' (*3aref howwa bye3mel eih*). The film is an ever-evolving process, he insisted, involving a constant effort to see, in concrete rather than ideational terms, what a particular location would look like on camera; what a particular actor would look like on screen; to anticipate, in short, what 'the film' will look like.

While the director is taken to be the seat of the film's core 'vision', it is nevertheless clear that the heads of each artistic team – e.g. cinematography, art direction, styling, sound – are actively involved in visualizing their own aspects of the film, with

more or less skill. In *Décor*, for example, the art director Asem Ali tried to anticipate transformations to the built environment in the Garden City location where Mostafa and Maha's apartment was going to be shot in order to enact an appropriate set according to his aesthetic sense, his reading of the scenario, his conversations with the other art director Nihal Farouk, and Ahmad Abdalla's demands. This skill can be evaluated by Ali's ability to envisage, first, what the set design will look like on screen (with the help of 'reference' images and various drawn/digitized set designs) and second, what steps are needed in order to execute this design. It is difficult to evaluate someone's skill in visualization except *a posteriori*, when a planned decision based on some visualized idea is actualized into an ill-designed set, or a widely popular color palette – whence the importance of past works in assessing the skill of artistic crew members. If Ali was hired in *Décor* to begin with, it is partly on the recommendation of his previous work on the set of *Harag w-Marag* (*Chaos and Disorder*, dir. Nadine Khan, 2012), a village-wide set built from scratch outside Cairo as one can witness in the movie.

While it would be incorrect to establish a crude causality between the use of digital technologies in the contemporary Egyptian film industry and the artistic worker's skill in visualizing some aspect of the film, I would surmise that, given the close contact between digital technologies and all artistic workers in *Décor* and *Poisonous Roses*, these workers underwent a subtle lifelong apprenticeship into digital habits of visualization. I could not elaborate on these habits beyond the specific projects that I have witnessed from 2013 to 2015. Only a longer-term study could demonstrate the link, if any, between digital technologies and the filmmaker's ability, here and now, to accurately anticipate how some aspect of 'the film' will look like later. In such a study, the weight of artistic decisions in past projects could more clearly be linked to the way in which artistic workers make decisions based on similar visual mediators, and it would be interesting then to examine to

what extent filmmakers reproduce their socio-technical conditions to yield similar results in different projects. In the absence of such long-term data, however, it is important to consider how visual mediators are summoned, in the present, to anticipate some aspect in the incoming future of the film; how these mediators summon artistic workers to synchronic conversations over what should be done about ‘the film’. I illustrate these kinds of conversations with the example of scouting in section III, but I believe that the wider point about the influence of visual mediators over the mediation of the film’s imponderability would hold whether one talks about casting videos, video-assist recordings, or the sound-editor’s image ‘*reference*’. In all cases, an image which is not part of the final film is used to anticipate, in the present, what the film will eventually look like. Thus, the film’s overall imponderability is turned into a series of contingent images, a little like a mosaic-maker visualizes her mosaic through its bits.

It is important to note that the future-orientation of visual mediators can sometimes be geared towards the next operation in the operational sequence, not the end product *per se*. Thus, when the art directors in *Décor* look at scouting pictures as I detail in the next section, their comments are not just about what would look nice in the film, but how they could design a set in this location, or how they would furnish it with appropriate props. One can distinguish two important moments here: a moment where the art directors try to see how the location can be transformed while selecting it; and another where they actively plan the transformation of the location, all the while eyeing the set’s look in the final film. To these ends, as I have suggested in chapter 4, a variety of visual mediators came in handy whenever artistic choices – of materials, of colors, of props – were being discussed in *Décor*. These choices, in turn, were nested in a socio-technical sequence where set design can only be physically delimited once a decision is reached about the shooting location. The same could be said about lighting or camera movement, where artistic

choices made by the cinematographer and the director are limited, in each case, by earlier choices in scouting.

Thus, it is important to accurately try to see not only what the final film will look like, but how the film-in-the-making will be made. This necessity is presumably not exclusive to the Egyptian film industry, yet its consequences have not been adequately described in existing media production ethnographies (see section II in introduction). Hoek's work in the Bangladeshi film industry stands as an illuminating exception in this sense (2014). With a particular interest in showing how 'obscene' material is made visible/invisible in the making of an action movie, Hoek shows how filmmakers anticipate, at every juncture in the production process, the inclusion of obscene 'cut-pieces' at later stages in production. Obscenity, in this sense, is not just present in the final film: it is made visible/invisible in screenwriting, for example, when a producer asks to add narrative 'hooks' where a cut-piece will be inserted; or in shooting, when 'obscene' material is shot away from the main studios; or in postproduction, when different cuts of the same movie are shown to the censor board or to cinema hall audiences in rural Bangladesh. In short, the necessity of considering *both* the final movie *and* its anticipated production process is as pressing to Asem Ali and Nihal Farouk, who were trying to see how a location might be arranged while scouting in *Décor*, as it is to the Bangladeshi director who tries to shoot sufficient visual material to edit a movie with good 'cut-pieces'. In both cases, the crew member – helped with various visual mediators, as I shall describe in section III – seeks to plan *both* an upcoming, unfinished, imponderable operation *and* the eventual film.

Since this kind of visualization can occur on several timescales – e.g. how the shooting location will be designed, how the design will be executed, how the overall thing will look in the end – can we observe specific moments where artistic workers are visualizing a particular timescale as opposed to another – e.g. thinking about a set design

vs. the set's look on camera? This question is difficult to answer without unmediated access to a filmmaker's mind, because one can easily imagine how artistic workers would be preoccupied by both near- and far-future imperatives as I have discussed in the case of executive workers in chapter 5. In my experience, artistic crew members discuss all timescales at the very same time. When Fawzi and I looked at scouting pictures brought by the production manager in *Poisonous Roses* (see next section), Fawzi would comment on the apartment's color (which would be difficult to change in set design, given our limited budget), the furniture (which would need to be changed when props were going to be chosen, again a tricky situation given the budget), the bathtub's size (since he had a particular scene in mind where Saqr is being shaved by his lover Nahed, which required a big bathtub), and the kitchen's position vis-à-vis the dining room (since he wanted enough space to shoot a one-shot take between the kitchen and the living room when Saqr first enters Nahed's house). These comments, which were made in succession by Fawzi whenever we discussed scouting, show how he was aware *both* of the next operation needed (e.g. how will walls be painted) *and* of the overall film (e.g. how will the color palette in the 'high-class' apartment match the film's overall color palette).

What should be clear, by now, is that visualization is not just bound by the single artistic worker's mind, but more so by her authority over artistic decisions and her skill in trying to 'see' the eventual film. No matter whether some artistic workers are better able to visualize the film or not, the established hierarchy of artistic authority settles all artistic disagreements. As I have described in chapter 2, all crew members contribute to the labor necessary to make the film, but this labor is submitted to the word of each artistic team's head and, ultimately, to the director's word. In addition to being a matter of skill, then, trying to visualize the film is an exercise impregnated in the micro-politics of artistic

authority, as I describe with specific scouting examples in *Décor* and *Poisonous Roses* in section III.

While I concentrate on scouting in what follows, I would argue that artistic authority and skill are crucial to all artistic work in film production, whether in screenwriting, scouting, casting, set design, fitting, shooting, editing, coloring, or mixing. In each case, artistic workers try to anticipate what a given character, a given shooting location, a given actor, a given set, a given take, a given sequence of takes, a given color palette, or even a given sound or music track will ‘look like’ in the film. The filmmaking process can seem most uncertain in the present – I still vividly recall Fawzi’s angst throughout screenwriting and preparations – but the imponderability of ‘the film’ is made contingent, in some respects, throughout the operational sequence of film production. Thus, Fawzi would say that he could ‘see’ his protagonist better once he had chosen the actor (Ibrahim el-Nagari), or that he could ‘see’ his story better once he had looked at the material on the location editor’s computer. This is not just a product of the iconic link between the visual mediator and the film, but it is equally a product of the cumulativeness of artistic decisions, where an initially formless scenario (e.g. Saqr on paper) gradually turns into a concrete image (e.g. Ibrahim el-Nagari on screen).

III. Scouting in Décor and Poisonous Roses

Going back to the chapter’s opening vignette, one can very clearly sense Farghalli’s irritation when Setohy tells him that he has no photo of the *neyaba* to show. This forfeited scouting picture is vital to Farghalli in two ways. On one hand, it gives him a goodish visual idea about the *neyaba*’s surroundings, which should help him in organizing his daily

logistics (e.g. parking shooting cars, storing equipment, and so on). On the other, and perhaps more importantly, it allows him to show artistic crew members what the shooting location looks like, so that they may decide on whether it fits their demands, whether it looks good on screen, and eventually, whether Farghalli should secure the location. I did not talk with Farghalli about this specific incident, but I presume that these concerns were on his mind while talking to Setohy, because by virtue of his position as line producer in the ongoing preparations of *Décor*, he was expected to coordinate all ‘executive’ elements necessary to the shooting. This duty involves showing potential shooting locations to the artistic crew in order to ease their choices, which means that Farghalli wanted a physical photograph of the *neyaba*, a most practical alternative to going on location, in person, to scout. Being the key intermediary between production legwork and artistic demands, Farghalli’s personal interest in having a scouting picture of the *neyaba* is surely not in trying to anticipate what the location will look like on screen, but to give the artistic crew a good idea about this look.

Indeed, what executive crew members do is not always aimed at trying to visualize the film. When I went to scout potential apartments with Setohy, after we had left the local broker Mamdouh, I saw Setohy walking around the Dokki neighbourhood, looking around for buildings whose exterior was in 1960s architectural style as per the artistic crew’s demands. He went on to ask local doormen whether they had apartments ready to shoot in their buildings and, whenever they were available, photographing the apartment. One cannot reasonably assume that, whenever Setohy was looking at a building, or chatting away with a doorman, or taking a snapshot, he was constantly thinking about the apartment’s look on screen, or even its logistical suitability. With a limited description of the apartment’s specifications in mind, Setohy participated in the narrowing down of the artistic options which were to be successively presented to the artistic crew on Farghalli’s

computer. To describe the *neyaba* as Setohy had done, with a mention of the building's shape and color, would not be sufficient in the absence of a photograph to see, physically, what the building can look like on camera.

The art directors Asem Ali and Nihal Farouk would comment on scouting pictures by pointing to those aesthetic elements in the location's design that did or did not match their criteria on partitioning, wall colors, furniture, etc. The cinematographer Tarek Hefny would comment on the location's visible light sources, its texture, its colors, etc. Ahmad Abdalla would comment on the location's overall appearance, or on its adequacy to the characters and the plot, or on its suitability to his intended camera movement. When everyone was gathered around Farghalli's computer to look at scouting pictures, each crew member would see something different in the same image. To Ali and Farouk, it was a document of the way in which the eventual location can be transformed in order to give it the aspect that they desire. To Hefny, it gave an idea of the location's natural light and atmosphere, and how it can be adjusted to give a particular texture to the film's image. To Abdalla, it gave a general idea of the space in which he can stage his story. With all eyes on Farghalli's screen, while he scrolled down long lists of scouting pictures, one can easily imagine how the artistic crew's expectations concerning the eventual shooting location (and, indeed, the eventual film) could come into conflict. While choosing Mostafa and Maha's apartment in *Décor* (see figure 5), Ali adamantly refused to shoot in an apartment that both Abdalla and Hefny liked very much. As he explained, the apartment's living room did not have enough 'angles' (*zawayya*), by which he meant that wherever the camera is positioned, the image's background will be a flat wall. He deemed this to be aesthetically unpleasing, by contrast with an imagined apartment that would have several layers in depth. Asem's opposition remained strong whenever he was shown pictures of the apartment in question, even after he viewed it in person. Nevertheless, he eventually

gave in to Abdalla's choice, because he explicitly recognized the director's ultimate authority over artistic decisions.



Figure 5 - Screen still from the contentious apartment in *Décor*, with Mostafa (played by experienced actor Maged el-Kedwany) pictured by the door.

While instructive with regards to the role of authority in settling artistic disputes, this incident shows how, even when the exact same image is under scrutiny, the kind of vision involved is determined by one's role on set and, specifically, one's authority over matters which will actualize the film. This situation compounds the imponderability involved in making a film. If creative possibilities can seem indefinite to the director, one can only imagine how many more possibilities are envisaged by the whole artistic crew, and how their expectations can not only conflict at times, but also become mutually unintelligible. This is not a strictly linguistic matter of miscommunication, but a very material difficulty in communicating images that approximate divergent expectations concerning the film's eventual appearance. The necessary approximations to this appearance are mediated by conversations among crew members and visual mediators. Given the specificities of each filmmaking process and its artistic members' aesthetic

preferences, the particular approximations that I have witnessed in *Décor* and *Poisonous Roses* may not compare to what happens in other Egyptian movies, let alone in global media industries. However, I would suggest that the role of visual mediators would be comparable in all these industries.

The scouting process in *Poisonous Roses* illustrates the central importance of visual mediators in communicating mutually unintelligible ideas. While we were still scouting, in accordance with Fawzi's wishes, I asked the production manager Edward Nabil to look for five missing locations with a limited budget in mind: a gas station where Taheya works at night; a bourgeois bar where Saqr meets with his middle-class love interest Nahed; a hospital where Nahed works; Saqr's apartment in the tanneries; and the 'high-class' apartment where Nahed lives. Fawzi and I gave Nabil some brief verbal descriptions of what we wanted in each case, and we provided him with a printed scenario to give him an idea of the movie's world. A few days later, Nabil triumphantly walked back in the office, boasting that he had secured several locations. When Fawzi asked to see pictures, he showed about one or two photographs of what he deemed to be 'high-class' apartments, and one long-shot photograph of a gas station, all taken on his Samsung phone. Fawzi swiftly told Nabil that the pictures were insufficient, since he (as a director) had no idea about the look of various angles within each location. Nabil proceeded to verbally describe what each location looked like, yet Fawzi would not have it: he wanted to see every angle depicted, in each location, and he methodically demonstrated to Nabil how he should go about photographing potential shooting locations.

When Nabil went on further scouting missions, he would bring back a more furnished portfolio of pictures, which eventually amounted to four or five 'high-class' apartments, three hospitals, two gas stations, a few apartments in the tanneries, and a handful of bars. While Fawzi was impressed by the volume of images, he was not fully

satisfied with the ‘high-class’ apartments secured by Nabil (see figure 6 & 7). Some were oddly painted, some had unseemly furniture, and some were partitioned in inconveniencing ways according to Fawzi. When he and I looked at these pictures, he would comment on various aspects in the apartment at once, including its color, its furniture, its partitioning, etc. When I showed pictures to Omar Abdelwahab, then the art director, and Houssam Habib, then the cinematographer, they made similar general comments about the scouted apartments, although they had different opinions about different apartments. The artistic crew’s indecision led Nabil on more and more scouting missions, and he was increasingly irritated by this indecision, especially given that the low-cost yet ‘high-class’ apartments that he had found (the majority of them in the upper middle-class neighborhood of Mohandessin) were being occupied by renters over time. As he kept telling me, he thought that he had brought apartments with the exact specifications given by Fawzi (including a kitchen opening on a dining room, a large bathroom, ‘high-class’ furniture), yet the director and his artistic crew were still not convinced.



Figure 6 & 7 - Exemplars from Edward Nabil’s scouting portfolio, with the living room (figure 6) and the bedroom (7) in a Mohandessin apartment, an upper-class neighborhood in Cairo.

When I asked Fawzi what he had in mind for the ‘high-class’ apartment, he would give me some evasive verbal detail. He mentioned that he wanted a ‘minimalist’ apartment at some point, a word that I had seen him discuss with Omar Abdel Wahab and Adel el-Siwi, his artistic adviser and one of Egypt’s foremost contemporary visual artists. Yet, I could not make out exactly what he wanted until he showed me a folder with generic pictures of ‘minimalist’ apartments, which seemed to have been gathered on Google images (see figures 8 & 9). We showed the folder to Nabil, who brought back pictures of new apartments in a similar style. Nabil kept referring to the new apartments as ‘high-class’, just like the old ones, yet the thin epithet that we had all been using masked a vast difference between the two types of locations, in addition to indexing a class difference between Nabil and us¹¹⁵.



Figure 8 & 9 - Exemplars from Ahmad Fawzi Saleh’s list of ‘minimalist’ apartments, with a living room (figure 8) and a bedroom (figure 9) in illustration.

¹¹⁵ The division of labor between artistic and executive workers in Egyptian film production tends to map onto a class distinction, since executive workers tend to come from a more popular (*sha3bi*) background, with associated taste hierarchies, while artistic workers tend to be middle or upper-middle-class, with a more educated eye in Bourdieu’s sense (1986).

This example illustrates how ‘executing’ an artistic demand is never a mechanical matter even when executive crew members like Nabil have no say in the film’s appearance. In some cases, execution relies on a representation of what the director or the art director or the cinematographer has in mind, which is admittedly difficult without tangible, visual proxies to anchor the discussion. In the context of scouting in *Poisonous Roses*, it was vital to have enough scouting pictures to show Fawzi what a location looks like, just as it was necessary to show Nabil some pictures of minimalist apartments in order to better evaluate the kinds of ‘high-class’ apartments that he needed to scout. These visual mediators are not only useful to the individual artist’s creation, but also to his/her discussions with fellow filmmakers. What should be clear, by now, is the obvious asymmetry between the verbal descriptions given by the director to the production manager and the visual mediators exchanged among them. It would seem that whenever the artistic crew could use a visual mediator, they would resort to it in order to refine their conversations about a location’s appearance in *Décor* or *Poisonous Roses*, to discuss it in more concrete detail. Although trying to estimate the film’s imponderable image is not impossible without the aid of visual mediators, it certainly seemed like the shooting locations became more tangible when broken down into more concrete scouting images.

IV. The Visual in Anthropological Theory

A central problem in visual anthropology lies in determining the distinct value of the visual when, as Pinney argues, ‘the historian [or the anthropologist] reads into [images] what has been learned by other means’ (2005: 260). The visual, in this sense, is taken as an *illustration* of an argument whose substance is not necessarily visible in itself. This is

evident in the social scientist's casual use of visual materials in classrooms and academic conferences (see Banks, 2001: 14-18), yet one could make a similar observation about most ethnographies of media production. As I have said in introduction, these studies are very useful in situating the lifeworlds of media producers, including the narratives that they create, the imagined audiences that they address, the labor that they expend in production, and the various power structures constraining their action. Whether in Meyer's study of popular Ghanaian cinema and its insertion in local Pentecostal discourses (2003; 2004; 2015), or in Larkin's attention to the aesthetics of outrage in Nigerian video film (2008), or in Ortner's attention to the discursive links between 'generation-X' and indie film production in the United States (2013), or in Martin's attention to the risky labor of stunt workers in Hollywood and Hong Kong cinema (2012a; 2012b), or in Wilkinson-Weber's attention to costume-making in Bombay cinema (2005; 2010; 2014), or in Ganti's attention to the professional 'boundary-work' operating in Bollywood (2012) – in all these cases, the typical attention to narrative, imagined audience, labor, and ideology cannot answer Pinney's challenge to examine the visual 'in itself'. If my experience in the Egyptian film industry is any indication, however, these studies would benefit from a more detailed engagement with the role of visual mediators in media production.

Several visual anthropologists (including Pinney, 2001; 2002; 2004; MacDougall, 2006; Pink, 2006) have suggested an increased attention to the corporeal ways in which we interact with images. Thus, Pinney provocatively argues that the disembodied 'aesthetic' reception of visual artworks needs to be counterbalanced by 'corpoethetics', that is, 'the sensory embrace of images, the bodily engagement that most people (except Kantians and modernists) have with artworks' (Pinney 2001: 158). With specific reference to cinema, MacDougall has similarly argued that 'all films are designed to generate a continuous interplay of stimulus and bodily response between screen and spectator' (2006: 20). The

visual, here, stimulates an embodied, sensory response, and this is precisely what can be understood by visual analysis which cannot be understood ‘by other means’. While this argument is suggestive when considering the embodied nature of visualization, it remains insufficient to explain the role of visual mediators in a concrete filmmaking process. Contrary to the finished artworks in Pinney’s analysis, these images are not meant to be appreciated in any corpothetic sense. The sensory responses produced by their examination are subdued to their expected effect, which is to materialize (immediately, to the filmmaker) what a particular location, a particular set design, or a particular actor will look like (later, in the film). As such, it serves to make somewhat more contingent some aspect in the film’s imponderable appearance to individual artistic workers.

To analyze the situation of visual mediators in commercial film production, it is useful to resort to C. S. Peirce’s definition of a sign as ‘something which stands to somebody for something in some respect or capacity’ (1932: 2.228). The sign, in this case, is a visual mediator standing, to the artistic worker, for the eventual film or some aspect of its appearance. In what ‘respect or capacity’ does the image thus stand? Peirce’s famous distinction between icon, index, and symbol is useful to elucidate this point¹¹⁶. In most cases, the visual mediator entertains an *iconic* relation with its object (i.e. the film). The artistic worker literally *sees* what some aspect in the film will look like on screen. When the stylist in *Décor*, Salma Sami, took fitting pictures of Horeya Farghaly’s costumes with a digital camera, she was not just trying to estimate, visually, what kinds of adornments were needed to give the actress a certain look; more importantly, she was looking at what the actress will literally look like in the film’s image. Since *Décor* was to be shot in black

¹¹⁶ This threefold distinction qualifies the relation between a sign and its object. In Peirce’s words, ‘an *Icon* is a sign which refers to the Object that it denotes merely by virtue of characters of its own, and which it possesses, just the same, whether any such Object actually exists or not. (...) An *Index* is a sign which refers to the Object that it denotes by virtue of being really affected by that Object. (...) A *Symbol* is a sign which refers to the Object that it denotes by virtue of a law, usually an association of general ideas, which operates to cause the Symbol to be interpreted as referring to that Object’ (1932: 2.247-2.249).

and white, Sami would adjust her camera settings in order to take black and white pictures. If she simply wanted to see what costume or what accessory was to be chosen, she would presumably not have tried (with great technical difficulty) to change her camera settings in order to approximate the actual, visual look in the black and white movie.

One can make a similar analysis of the way in which Ahmad Abdalla took time to set the camera monitor and the video-assist monitor in black and white in *Décor*, with some technical difficulty again. He wanted to see, literally, what each take would eventually look like in editing – and, ultimately, in the film. To be sure, the image on the monitor and the image in the editing studio is technically not ‘the same’. As Abdalla explained to Ibrahim el-Batout on set (a director who acted as a director in *Décor*), the monitor image is just a ‘look’ inserted in the camera software. The ‘raw’ image, the digital content recorded by the camera and destined to be edited, is actually shot in color, in order to maintain its maximal quality. Most postproduction in *Décor*, likewise, was done on a black and white ‘look’ which served as a reference to the editor, the colorist, and the mixer, although the film material was still technically in color. In other words, what matters most is the iconic relation between the visual mediator and the film, not necessarily the material link between them. Thus, when Abdalla watches his video-assist monitor on set, the black and white image presents itself to Abdalla as an icon of the eventual black and white film, which is what interests him more than the digital image’s technical specifications.

In limited cases, including all manner of computer designs and drawings, the visual mediator entertains a *symbolic* relation with the final film. The floor plans traced by Nihal Farouk on AutoCAD offer a great example. While the plan was readily discussed by her assistant decorators and prop assistants to ‘see’ how a given apartment is divided and where the furniture would be disposed, the two-dimensional lines on AutoCAD were

hardly icons of the actual apartment. Although one may argue that other software tends towards iconicity (e.g. SketchUp), the general rule whereby the floor plan represents the apartment is given by a conventional system of symbols, where lines represent walls, windows, tables, or chairs. To the extent that the eventual image cannot physically affect the current image, one may say that visual mediators are never indexical of the final film object, although the concrete labor invested in making visual mediators is denied its indexicality by the artistic crew seeking to visualize the film (see chapter 7). This last point implicitly suggests the danger inhering in a strictly semiotic approach to the activity of visualization. The same sign can stand to different people for different things at different times, and by extension, the semiotic relation is not only ‘context-dependent’, but bound by the specific operational sequence within which it is inserted. Thus, the same scouting picture of a *neyaba* can stand as an *icon* of the final film to Ahmad Abdalla (in the present), an *index* to Setohy (when he is asked to scout a *neyaba* in a later film), and a *symbol* of the importance of scouting pictures to the anthropologist writing a thesis.

Deleuze’s distinction between the ‘actual’ and the ‘virtual’ is useful in approaching how an ‘identical’ image can be seen in different ways by different social agents (1966; 1996). The actual is the concrete image in the present, as well as the concrete image of the film in the future; the virtual is a possible image which is materially indistinguishable from its concrete form, yet is dedicated (*vouée*) to actualize an eventual image. Thus, the actual scouting picture is the concrete image of the location, while the virtual scouting picture is the image of the location as it should look on camera, eventually, in shooting and on screen. To the anthropologist, the scouting picture might look like an empty apartment; to the art director, it might look like the background of a film shot; to the director, it might look like a space where he can stage a story. All these views are not solipsistically imagined by genial minds, since everyone relies on an actual picture to discuss the various

problems at hand, yet these views are ‘virtual’ in the sense that they are ‘in actualization, in the process of being actualized, inseparable from the movement towards [their] actualization’ (Deleuze 1966: 36). The crucial point is that the virtual scouting picture is not a property of my imagination as opposed to the art director’s or the producer’s imagination, but a kind of visual potential, inscribed within the actual scouting picture – hence, the importance of its physical summoning by a reserve. This potential, in turn, tends towards actualization based on each agent’s skill and authority, as I explained in section II. Thus, while I (as an anthropologist) can understand what an art director or a director envisions with a particular scouting picture in the abstract, I do not necessarily possess the skill or the authority to actualize these visual potentials in shooting, thereby making my own visual interpretation incommensurable with the art director’s or the director’s, even though we work with the same material.

To consider visualization within a semiotic framework is useful in highlighting the specific mechanism whereby visual mediators are relevant to the activity of visualizing the film, but the spatiotemporal context within which this mechanism works is more fundamental. This is not only due to the fact that, as I have briefly suggested, the same document can accrue different meanings at different times, but that the same document can be read differently by different people at the same time. This problem is extensively discussed in anthropological studies of photography, whether the images are taken by anthropologists (see Edwards, 2002; Edwards & Hart, 2004; Morton & Edwards, 2006; Marion, 2010) or non-anthropologists (see Pinney, 2001; 2004; 2005; Meyer, 2010; Edwards, 2012; Frank, 2012; Gürsel, 2012; 2016). Without neglecting the image’s physical features, these studies show how particular meanings accrue to a given image by virtue of the socially learned skill and knowledge deployed by each interpreter. This is especially visible in Gürsel’s work on wire service photography in the Associated Press,

where she examines ‘the work of image brokers at key nodal points of production, reproduction, distribution, and circulation in the international photojournalism industry’ (2012: 72). ‘Image brokers’, she argues, ‘are the people who act as intermediaries for images through acts such as commissioning, evaluating, licensing, selling, editing, and negotiating’ (2012: 72).

Through a wide range of cases in New York, Paris, and Istanbul, Gürsel shows how decisions are made about taking, selling, or publishing photographs based on the broker’s expectations over the represented event in the image, the way in which it will appeal to publishers, and the way in which it should look like in order to be intelligible to the targeted audience. For instance, Gürsel (2016) insists on how images discussed in a seminar for aspiring photojournalists in Istanbul are interpreted differently by photojournalists from different parts of the world, not just based on different cultural frameworks, but also based on their experience within the photojournalism industry, their own ideas about what constitutes a ‘good’ photograph, and their own emotional attachment to certain photographs (e.g. Turkish photojournalists in the seminar had a hard time photographing victims of the 2003 bombing of the British Consulate in Istanbul). While visual mediators work in a markedly different manner in the Egyptian film industry, one may observe some continuity between visualization in film production and Gürsel’s emphasis on the knowledge brought by different social agents to their interpretation and, crucially, to their decision-making on given images.

While I have been discussing visual mediators as semiotic and visual content, I would argue that the role of technological objects in visualization is not simply to ‘contain’ an image through which filmmakers try to mediate the film’s imponderability. Rather, these objects act as reserves, summoning the artistic worker’s ability to imagine the eventual film in the present, by anchoring (in real-time) individual and collective

imagination concerning some aspect of the eventual film. As Strandvad notes with regard to screenwriting meetings in a Danish film project, artistic ideas remain shapeless until they are given a material form: ‘as long as an idea is presented verbally, it may be easily changed. To carry an idea further, it is essential to write’ (2011: 289). This point can be extended to visual ideas in Egyptian film production, whose inscription on technological objects ‘delegates’ – to use Latour’s term (1988) – the visual labor that would otherwise be incumbent on additional crew members – say, to describe the *neyaba*, instead of taking a picture of it. Without this delegation, the visualization process would be rather different, if not quite difficult, as was evident in the scouting of *Poisonous Roses*. By summoning reserves to yield visual mediators, the artistic crew members are themselves summoned to imagine the film’s image with an arbiter to their discussion in hand – something which would be missing were they arguing without any physical support. While Latour would probably argue that this delegation creates a symmetrical relation between humans and nonhumans, it is important to note that this apparent symmetry is only observable from the viewpoint of certain (artistic) crew members in Egyptian film production, whose authority and skill legitimate their seemingly ‘unmediated’ interaction with the image. Visualizing the film, in short, is an imponderable problem mediated by artistic workers trying to foresee how each element under their authority will look in the film.

V. Seeing and Foreseeing the Film

While it is hypothetically possible to visualize the film on a purely oral level, this visualization is in practice overwhelmingly mediated by technological objects in today’s Egyptian film industry. These objects act as reserves to summon artistic discussions, which

are in turn oriented to the incoming future of ‘the film’. The stylist’s camera is a reserve of costume-fitting pictures that can summon, at any given time, a discussion between the director and the stylist over a character’s look. The line producer’s laptop is a reserve of scouting pictures that can summon artistic discussions over shooting locations. As I hope to have described in detail, visualization is neither essentially technical nor essentially social, but corresponds to a specific socio-technical configuration, organized in a specific division of labor within a specific operational sequence in Egypt. When the stylist Salma Sami took a fitting picture in order to foresee the star Horeya Farghaly’s look in *Décor*, the picture stood to the stylist *at once* as the picture itself, the picture of what she would like to see (literally), and the picture of what she would like to modify or keep in the actress’ look (in the future). In other words, just as one cannot separate these three ‘pictures’, one cannot separate the technical and the social in visualizing the film. Technological objects cannot be understood as ‘containing’ some socio-technical process, since the content of visualization is neither ‘inside’ or ‘outside’ the camera, just as it is neither ‘inside’ or ‘outside’ Salma Sami’s head. It oscillates, to use Deleuze’s terms, between an actual and a virtual image.

To some extent, of course, the stylist evaluating an actor’s *look* with a picture or with the naked eye visualizes the look with an attention to a similar kind of incoming future. This does not mean that the activity of visualization remains essentially ‘the same’. In one case, to use Sami’s example again, the stylist has some physical evidence to see Farghaly’s look (i.e. with a digital camera). In the other case, the stylist only has her foresight to work on the actress’ look. Visualization in the initial sense distributes the stylist’s mind between the actor’s actual look, the picture, her imagination, and perhaps a conversation with the director, while visualization in the second sense only distributes her mind between the look and her idea about it. In this sense, I argue, whatever is visualized

is different, especially when more than one social agent is involved. In one case, there is an icon-like image establishing a physical link between itself (i.e. the actress' look in the fitting picture) and the incoming future (i.e. the actress' look on screen). In the other case, there is just the stylist's internal image of the actress now and the actress on screen. This does not mean that the stylist is not central in visualizing the actor's look, no matter what visual technology is involved. Simply, it means that *despite* the fact that the stylist is central without a fitting picture, the socio-technical configuration through which the film's imponderability is mediated alters the nature of visualization, especially (again) when it comes to communicating visual ideas among artistic and executive crew members.

To be clear, I do not believe that digital technologies are necessary or sufficient to visualize the film – indeed, pre-digital filmmaking practices were very successful with paper-based visual mediators. Still, I maintain that these mediators co-constitute ongoing attempts at breaking down the film's imponderability into a series of images. To take another example in *Décor*, it was not uncommon to see the art directors discussing a particular prop choice orally, and agree right afterwards on sending each other 'reference' pictures in order to settle what prop style they were envisioning. These references were not marginal to the visualization that would have taken place earlier, in the minds of the art directors. Rather, I would argue that these images are integral to the way in which art directors imagine props. Their material existence is qualitatively different from whatever mental image might have been produced by the conversation between both workers. Visualization, here, is simultaneously and materially anchored in visual mediators designed to approximate some aspect of an upcoming artistic operation or, indeed, the final film. This is not just by virtue of the iconic proximity between visual mediators and the film, but also by virtue of reducing artistic imponderability – that is, by limiting the range of creative possibilities on the artistic crew's minds with concrete, physical images, whose

discussion in real-time can expose potential misunderstandings or narrow down artistic possibilities. In this way, the multifunctional properties of digital objects are channelled into a specific socio-technical use, whereby the current image, the next artistic step, and the film's eventual look are made present to the artistic worker's mind.

Chapter 7

Enchanting the Audience

I. The Brazilian Viewer

Oftentimes, when we discussed his scenario, Ahmad Fawzi Saleh would remember the salient comments that he had received in years passing. He cherished one comment in particular, made by the Brazilian director Karim Aïnouz, who told him that his film needed to be about the ambiguous relationship between Taheya and her brother Saqr, inside the world of the tanneries, and that he should not bother with Saqr's bourgeois lover, Nahed. It is no wonder that in the summer of 2015, when we started rewriting *Poisonous Roses* to commit to a storyline where Taheya became the protagonist, Fawzi would recall Aïnouz's comment and admonish himself on not having listened to him earlier. The fact that Aïnouz, as a Brazilian viewer, would be attracted to this specific storyline was among the reasons that reassured Fawzi, as we began rewriting, that it was the right decision to make. Undergirding this sentiment was his desire to appeal to an international audience, beyond the confines of Egyptian critics and viewers, which is why he would invoke the abstract figure of the 'Brazilian viewer' as a metonymy to describe 'the viewer who has nothing to do with Egypt yet would be intrigued by my story'. In fact, Fawzi would have recourse to my own judgment as an indication of what the non-Egyptian audience might understand or feel in some scenes. Since I knew that this is the way in which he approached my comments, I somewhat cheekily adopted the trope of the 'Brazilian viewer' in my own vocabulary, prefacing my interventions on his scenario with the phrase, 'As a Brazilian viewer, I would/would not...' There is, of course, no sense in which Fawzi or I know what

empirical Brazilian audiences could feel if they watched *Poisonous Roses*, and I have no illusion that I speak in the name of these audiences. The ‘Brazilian viewer’ was a placeholder to describe the anticipated audience of Fawzi’s film, whose composition and eventual reactions remained imponderable to us.

Addressing an audience is a central component in the artistic worker’s practice. The exact nature and scale of the imagined audience, however, is impossible to assess in the course of media production, with important consequences over the process of film production and, by extension, the film product. In Bollywood, Ganti describes how Bombay filmmakers experience great uncertainty concerning the commercial success of their movies. To alleviate this uncertainty, they try to anticipate their audience’s reaction with ‘production fictions, which are truisms, axioms, and structures of belief about what is necessary for commercial success’ (2012: 12). While it would be interesting to examine these production fictions in Ganti’s detail¹¹⁷, this chapter will examine a different way in which the audience’s composition and reaction is anticipated, more in line with what Hoek suggests in the case of Bangladeshi popular cinema (2014). After explaining that the main audience targeted by popular romantic action movies in Dhaka are young male country dwellers (known as *mofussil*), Hoek demonstrates how this imagined audience is inscribed in the movie’s making. She describes, for instance, how the producer asks for additional ‘spice’ (*rosh*) in the screenwriting stage in order to better sell his movie to the lecherous male audience; how the cameraman twists his camera in order to create surprise effects

¹¹⁷ In Cairo like in Bombay, such truisms, axioms, and structures of belief affect the way in which filmmakers imagine the sociological composition of their audience – a little like Bombay advertisers imagine a ‘middle-class Indian consumer’ as a primary marketing target (see Mazzarella, 2003) or like Bombay TV producers imagine the ‘maid’ as an archetype of working-class female consumption (see Matzner, 2014). In a similar sense, I have very regularly heard that the ‘popular, young, male audiences’ in downtown Cairo crave movies with violence (*baltaga*) and women (*neswan*), which singlehandedly explains the ongoing success of Sobky movies. The Sobky groups are technically three autonomous companies, respectively managed by Ahmad, Mohammed, and Karim el-Sobky, but in recent years, the ‘Sobky formula’ emerged as a pop culture concept designating the formal characteristics of a form of popular entertainment focusing on popular (*sha3bi*) songs, *baladi* dancing, and a great deal of male violence. In their narrative overflow, Sobky movies are closer to the Bollywood spectacle than the linear Hollywood storyline emulated by many Egyptian films.

among his excited viewers; how the editor inserts ‘juicy’ cut-pieces to attract the imagined rural men to the theatre. These practices not only involve ‘production fictions’, but a set of socio-technical actions inscribing the audience into the movie’s making.

As I write these lines, *Poisonous Roses* is still in postproduction, and little do we know about its prospective empirical audiences. The audience imagined by Fawzi stands in contrast to the one stereotypically imagined in ‘commercial’ (*togari*) projects in Egypt. Fawzi intentionally defines his audience in a broad, internationalist sense, in conscious contradistinction to the national or Arab audience envisaged by the commercial industry. Although he would disagree with the label ‘festival film’ to designate *Poisonous Roses*, this is how Fawzi’s project (much like *Décor*) would be classified by most industry insiders – i.e. as an ‘artistic’ movie destined to be shown in international film festivals, without expectation of commercial success in domestic theatres or regional satellite channels. As I explained in chapter 1, labels like ‘commercial’ and ‘artistic’ are matters of professional distinction, which do not impact Fawzi’s basic intent to sell his movie and anticipate its success in specific markets (e.g. festivals, cultural initiatives, European television channels).

Starting with this recognition, this chapter examines how artistic workers in the film projects in which I have participated – *Décor* and *Poisonous Roses* – mediate the imponderability of their audience’s composition and reaction in the course of production. I will not so much discuss the positive aspects of this mediation, which include a representation of the audience’s sociological profile (as in Ganti’s production fictions) or an active inscription of this representation in socio-technical practice (as in Hoek’s work), but I will highlight more tacit aspects in this mediation and its effects over filmmaking as a socio-technical process. I will argue that Egyptian filmmakers aim at ‘enchaining’ their imagined viewer, which invariably involves a ‘reification’ of the labor invested in the

film's making. In section II, I describe how the audience is imagined to be 'enchantable' by Egyptian filmmakers, who try to constrain the viewer's ability to interpret the film by making it seem like a seamless narrative (*qessa*). In addition to being enabled by certain conventions of spectatorship, this enchantment is enabled by 'reification' – that is, the serial hiding of any and all traces of concrete labor expended in physically making movies.

In section III, I situate my conception of reification in the wider genealogy of the notion in Marxist theory, and I refine its use to a more narrowly etymological sense, as a transformation of social relations into physical mediators. Reification, in a way, becomes the extension of Marx's commodity fetishism in the sphere of production. It involves the transformation of socio-technical relations of production (e.g. the legwork involved in scouting) into relations between things (e.g. scouting pictures). In section IV, I provide ethnographic evidence to sustain the claim that the work invested in production is serially 'reified' in the course of production, with different effects according to the worker's position in the industry's labor hierarchy. I maintain that this reification is not necessarily alienating to Egyptian filmmakers, who have developed specific means of recognition to artistic and executive workers. Distinguishing between reification and alienation, in this sense, allows us to understand how concrete workers can still be valued by industry insiders even if their work is, objectively, consumed by various mediators – e.g. scouting pictures, props, audiovisual material, and the edited and mixed material.

Section V, in conclusion, ties the chapter's core argument together. At every significant juncture in the film production process, the imponderable problem of trying to imagine an audience is broken down into more or less contingent decisions to be taken by artistic workers. Through these decisions, an imagined audience is produced according to 'production fictions' and their inscription in socio-technical practice, as well as implicit representations of the viewer's 'enchanted' reaction, which requires the work invested at

each juncture in filmmaking to be ‘reified’. Without being alienating as such, then, reification is the logical corollary to enchantment as a tacit way in which the imponderable audience is apprehended by Egyptian filmmakers.

II. Enchantment

The voluminous literature on the ‘oneiric’ character of cinema is striking insofar as it eschews the concrete labor invested in making these ‘dreams’¹¹⁸. The seeming contradiction is that even if the audience knows that the film is a crafted artifact – when the audience is composed by industry insiders, for instance – it is still imagined to see the film as a seamless fictional narrative (*qessa*). It is as though, to borrow Dilley’s idea (2004), the sphere of production is intentionally made invisible to allow the free play of values and meanings in (film) consumption. The way in which production is made invisible extends to the most conspicuous technological implements. As Benjamin remarked in his visionary essay on the artwork, ‘the equipment-free aspect of [filmed] reality (...) has become the height of artifice; the sight of immediate reality has become an orchid in the land of technology’ (2007: 233).

Inattention to the concrete work of commercial film production is partly what drove Powdermaker’s pioneering ethnography in Hollywood (1950). Powdermaker sought to show how ‘totalitarianism within the industry’s social structure radiates outward (...)

¹¹⁸ I cannot hope to exhaustively review this literature, but it should be noted that the comparison between the film’s reception by the spectator and the dream’s reception by the sleeping mind has been a staple feature in film theory since, at least, Epstein’s *L’intelligence d’une machine* (1946). In Morin’s *Le cinéma ou l’homme imaginaire* (1957), the oneiric character of film anchors a ‘dialectic’ understanding of the spectator’s projection onto/identification with the on-screen image. With a more psychoanalytical bent, Metz argued that some films can be analyzed in exactly the same terms as the psychoanalyst analyzes dreams (1982). Similarly, in Baudry’s early formulation of ‘apparatus theory’, the ‘film-as-dream’ becomes an ideological effect seeking to mask its illusory nature with factual ‘realism’, which is deemed to be breakable through the sophisticated tools of criticism, Lacanian psychoanalysis, and Marxist social theory (1975).

from the silver screen to impose empty, distracting dreams (“the dream factory”) on passive viewers’ (Askew, 2002: 4). In this manner, her ethnography was less sensitive to the contingencies of film production than the studies of commercial filmmaking made by contemporary anthropologists (see Grimaud, 2003; Larkin, 2008; Ganti, 2012; Martin, 2012a; 2012b; Hoek, 2014; Meyer, 2015; Pandian, 2015). These studies are instrumental in describing how films are made in practice, and how their concrete making has really nothing ‘dream-like’. A mere glance at the physical injuries sustained by Hollywood and Hong Kong stunt doubles suffices to dispel the illusion (see Martin, 2012b). However, this literature does not address the question of why filmmakers, in Egypt as elsewhere, still imagine their audiences as perceiving the film in a ‘dream-like’ manner. The question at stake, here, is not what empirical audiences think about the process of film production while they are watching the movie, as I do not wish to speculate on the matter without hard evidence, but to what extent the audience imagined by media producers is deemed to want ‘dream-like’ narratives.

This kind of escapist film spectatorship, exclusively oriented to the ‘in-built’ narrative of the film, is by no means universal. In a short article on movie consumption in Tonga, Hahn (1994) describes how film spectators abide by local conventions of spectatorship borrowed from song-and-dance performances known as *faiva*, where the spectator is expected to shout his praise towards the performer (or the movie screen, as the case may be), and where the performance is accompanied by live commentary (which, in 1990s Tonga, becomes secondary storytelling over non-translated American movies). Likewise, in ‘popular’ (*sha3bi*) movie theatres in Cairo, groups of young men overtly heckle the movie while interacting with the characters on screen, perhaps offering them advice or guarding them against their anticipated fate (see Armbrust, 1998). Even in Euro-American settings, the contemporary conventions according to which the spectator ought

to sit in silence in a dark theatre in order to appreciate the movie were historically cultivated through conscious efforts to discipline the spectator's body. As Ethis explains in the case of early 20th-century France (2009), popular audiences would rowdily engage with movies as with fair entertainment, in a manner reminiscent of Cairo's *sha3bi* theatres today. In all these contexts, it is safe to assume that the 'seamless flow of narrative' presumed to be experienced by all spectators is disrupted by varying conventions of spectatorship. What is more interesting is not to point out this obvious discrepancy, but to examine the way in which Egyptian filmmakers assume the existence of this spectator. Indeed, Egyptian filmmakers 'reify' their labor in an attempt to 'enchant' this imagined viewer.

This statement requires explication: what do I mean by 'reify'? And what does 'enchantment' mean in this context? As I shall elaborate in sections III and IV, what I mean by 'reification' is that the work invested by filmmakers intervening earlier in the operational sequence of film production is objectified in the physical mediators *passed on* to filmmakers intervening in later stages. Postproduction workers, who intervene at the latest stages in film production, already reify the labor invested by workers in preparations and in shooting. Crucially, reification is not exclusively the product of the spectator's gaze as argued by some versions of apparatus theory (see Mulvey, 1999), but an ordinary aspect of the work of film production. I would argue that the particular way in which Egyptian filmmakers – and especially postproduction workers – reify the labor invested in making the film is aimed at enchanting the film's imagined audience. This argument is based in Gell's reflections on art as a 'technology of enchantment', as summarized in the following lines,

The power of art objects stems from the technical processes they objectively embody: the *technology of enchantment* is founded on the *enchantment of*

technology. The enchantment of technology is the power that technical processes have of casting a spell over us so that we see the real world in an enchanted form. Art, as a separate kind of technical activity, only carries further, through a kind of involution, the enchantment which is immanent in all kinds of technical activity. (1992: 44)

In an earlier essay, Gell defines technology as a contrived way to arrive at uneasily accessible ends. In this view, the technology of enchantment comprises ‘all those technical strategies, especially art, music, dances, rhetoric, gifts, etc., which human beings employ in order to secure the acquiescence of other people in their intentions or projects’ (1988: 7). Enchantment, then, is the state in which the targeted receivers are compelled to acquiesce to the intentions of the ‘enchanters’. To put it in my fieldwork’s terms, the imagined audience is seen to be compelled to watch the story crafted by artistic crew members – it is seen, in short, as being ‘enchantable’. What exactly compels this enchantment? Gell argues that these obligations are possible *precisely* because of the ‘enchantment of technology’, that is, the ability of technical virtuosity to bedazzle the targeted audience. Citing an anecdote about a matchstick model of the Salisbury cathedral, which mesmerized the younger Gell enough to donate some money to the church, the adult Gell argues that the church’s (presumed) intention to extract money among believers was successful because of the ‘enchanting’ architecture of the cathedral and, even more so, the matchstick model. To the young Gell, who knew exactly how difficult it was to make such a matchstick structure given his childhood experiments with matches, the model elicited the ‘enchantment of technology’, a bedazzlement caused by the barely fathomable technical skill invested in making an artwork – or, in our case, the film.

On the whole, Gell’s theory of art is very relevant to the work of Egyptian film production (see his *Art and Agency*, 1998), but I wish to highlight two central points in his theory with relevance to this chapter. First, as Gell argues, the artistic worker’s intention is to dazzle his audience. Little evidence is provided to sustain this assumption in Gell’s

writings, which puts him in a position of arguing that the social agent's intent could be discerned in some objective interests (e.g. the church's interest in gaining money from believers, or the Kula canoe maker's interest in acquiring more valuable goods). This evidence is much easier to provide, empirically, in the case of Egyptian film production. In interviews with numerous directors, I have been told that the goal of filmmaking is to make something that 'has never been seen before' (*3omroh matshaf 2abl keda*). This statement can be taken in two senses. In a literal sense, some directors want to show, in the movie's image, locations or actors or props or costumes that have never (or almost never) been seen on screen in the history of Egyptian cinema (or as the case may be, world cinema). The directors with whom I talked presume, therefore, that the audience carries a certain art-historical baggage, and they seek to contribute something 'new' to this baggage. This is certainly the case of artistically minded directors like Ahmad Fawzi Saleh, who explicitly sought to shoot Cairo's tanneries district like it had never been shot in the history of Egyptian – indeed, world – cinema. This intention is equally true of more 'commercial' directors like Ismail Farouk, who told me that he constantly sought to introduce 'new' locations and 'new' characters to Egypt's people (*el-sha3b*). Although they aim at different audiences with different art-historical references, each director sought, in his own way, to dazzle the audience with 'never-before-seen' imagery.

In a broader sense, the imperative to make something 'never-before-seen' can be understood in technical terms, in the sense of using 'new' directorial tools – e.g. camerawork, image editing – to dazzle the audience through technical virtuosity. This is exactly how the cameraman in Hoek's ethnography anticipates the reaction of his rural Bangladeshi audience: when he twists his camera to create an action effect, he expects the audience to exclaim '*eh shala!*', or 'what happened?!' (2014: 69). As Fawzi would tell me, his objective is always to elicit a gasping reaction among imagined viewers, pushing them

to ask, ‘How did they do this?’ (*homma 3amalo dah ezzay?*). In this case, he was specifically talking about dazzling an international audience with the cinematic feats of a low-budget movie producing amazing imagery in a tough location like the tanneries without much in the way of technical effects. Still, one can recall Fawzi’s bedazzlement (*ebhar*) with editing software as I evoked in chapter 4 to illustrate how technology is integral to the aim of achieving a sense of wonder among imagined viewers, insofar as *teknologia* is conceived as a tool of indefinite creativity.

This brings the second key feature in Gell’s argument. Viewers are imagined to try to grasp the technical skill invested in the making of an artwork (or, in this case, the film). In my experience, the audience members who have some relevant skill to the artwork’s making (like the younger Gell with matchsticks) are more likely to be dazzled by their inability to understand some technical displays, since they know how difficult a given operation can be. There is a distinction, here, between the ‘ordinary’ viewer, the passive spectator imagined by artistic workers in Egypt, and the empirical audiences with whom I have been in closest contact – that is, workers in the Egyptian film industry. Whereas the ‘ordinary’ spectator is expected to perceive the film as a seamless story, all the while remaining puzzled by its making (although, as I mention below, empirical viewers are well able to ‘see through’ the movie), the filmmaker’s enchantment is colored by his own *savoir-faire* as well as his general knowledge of the time, money, and effort taken to make movies.

While we were shooting in *Décor*, the assistant grip Ahmed Nader was chatting away with the clapper Abdelsalam Radwan about an Indian movie that he had recently seen. Nader was marveling about a particular shot in a car chase where the camera seemed to move inside and outside the car, in a seamless 360° angle, without a single editing cut. His overall sense of amazement came off as saying something like ‘how did they do this?!’

Abdelsalam replied that only a technocrane can pull off the trick, but Nader was not convinced, as the motion moved in and out of the car without apparent obstacles. While Nader was talking, I remembered a discussion with the lighting script Hany Morsy about a similar one-shot scene in the American movie *Children of Men*. Hany said that he kept marveling at the way in which that shot was made until he saw the shot's making-of online, at which point he proceeded to describe the various gripping contraptions invented specifically to realize this shot, including a specially equipped car with a removable roof. I submitted to Nader that the Indian movie may have used a similar contraption, but he remained somewhat skeptical, as he was still amazed by the Indians' display of technical virtuosity.

This example is a straightforward illustration of the 'enchantment of technology', especially to a skilled practitioner. I would argue that Nader was particularly struck by the camera movement in this shot because he knew exactly how hard it is to rig motion equipment well enough to produce such a seamless, 360°, one-shot scene, especially when the camera seems to move in and out of the car! So many things can go wrong in this kind of shot (i.e. so many things can disturb the take's seamlessness) that it is incredible to believe that someone may have had the audacity to attempt it, let alone succeeded in shooting it. And even when verbal explanations are provided by the anthropologist, they are insufficient to reconstruct the technical *savoir-faire* whereby the Indian filmmakers were able to make this shot, and whereby Nader would have tried to execute the shot had he been asked to do it. This can explain why he was still mesmerized by the Indian movie: not because 'the Indians' are actually more skilled (a statement which, on its own, may elicit chauvinistic disdain among several Egyptian filmmakers), but because they have been able to make a shot that 'we', Egyptian filmmakers, cannot imagine making.

When the imagined audience is deemed capable of ‘seeing through’ the seamless flow of the film in particular moments, it ceases to be enchanting. To give one example among many, I remember an Egyptian friend’s reaction to the special effects in *The Blue Elephant* (*El-Fil el-Azrak*), a high-budget action movie about a criminal psychologist’s investigation into a murder committed by a particularly difficult and apparently paranormal patient. This friend was unimpressed by the special effects in the film, which were an important selling point in the movie’s marketing campaign. He even implied that it distracted him away from the movie – a common reaction among Egyptian viewers who are used to the more ‘convincing’ effects presented in American commercial cinema. This kind of reaction to a movie, which can be described as an ‘unplugging’ (*fasl*), is precisely what Egyptian artistic workers try to avoid. Only when the imagined viewer fails to ‘see through’ the technical skill invested in a movie can s/he be genuinely ‘enchanted’. This sentiment is well illustrated by the mixer Mohammed Fawzi’s remark in chapter 3, according to whom the sound mix needs to sound as ‘natural’ as possible in order to avoid bringing the imagined viewer’s attention away from the storyline (*qessa*).

This is most surreptitiously manifested in the convention of *continuity*, which is preserved at all costs in order to avoid snapping the imagined spectator out of the story. Image and sound postproduction, in particular, are aimed at eliminating any trace of the concrete labor invested in making the film, thereby manufacturing a seamless narrative. This convention is not restricted to postproduction: in casting, to take one example among many, the tendency to select actors that are ‘convincing’ (*moqne3in*) is not only dictated by the director’s aesthetic preference, but by the imperative to maintain the spectator ‘locked’ into the narrative. In shooting, takes are systematically repeated when artistic crew members notice that some workers appear in glass reflections in the background or in shadows on the wall. For similar reasons, any ‘drops’ in the continuity script supervisor’s

job are loathed (e.g. an actress wearing two different dresses on the same day, or a prop being visibly displaced in a jump cut within the same scene). All these seemingly disparate behaviors are in fact guided by the unexamined convention of continuity, setting as many constraints over the logistical and artistic imponderability of the filmmaking process.

It seems to me that the idea of showing an enchanting narrative to the imagined passive viewer is intrinsically tied to the hiding of all traces of labor in film production. This hiding, as I argue in sections III and IV, is premised on a successive ‘forgetting’ of the labor invested by earlier crew members into physical mediators throughout the operational sequence described in chapter 3. I have already explained how this desire to enchant is expressed by Egyptian directors, but I would argue that this work permeates all artistic decisions in filmmaking. Following Benjamin’s remark, Egyptian film sets are filled with equipment which, in the diegesis of the film, becomes entirely (and intentionally) invisible. When a piece of the boom microphone shows in the top of the frame, or when the reflection of crew members shows on glassy surfaces, or when the shadow of a non-diegetic moving body is visible on camera, the director will systematically elect to retake these shots. In all these instances, all deemed to be ‘mistakes’ (*ḡalatāt*) in the industry’s insider talk, the actual workers involved in making the film are removed by artistic decree. Were they to remain in the film, they would break the illusion.

Prior to shooting *Poisonous Roses*, Fawzi would jokingly tell me that he would love to ‘break the illusion’ (*yeksar el-ihām*, a reference to Brecht’s *Verfremdungseffekt*, a set of theatrical techniques developed by the German playwright to collapse the ‘fourth wall’ separating actors from their audience). Still, while we were shooting, the young director took great care to hide the concrete equipment and labor employed in the course of filmmaking. Once, we reshot Nahed’s entrance in her apartment a day after the scene was over because the editor Mostafa Nour had noticed (while reviewing the previous day’s

material) that the shadow of a crew member was visible on a wall right in the middle of the one-shot sequence. Although the shadow was not evident to my eyes, and I had to re-watch the sequence in order to make sure that it was well and truly there, Mostafa's trained eyes caught these 'mistakes'. Even when an artistic worker is keenly aware of ways in which a movie can break its seamlessness, the worker tends, in my experience, to still seek enchantment by erasing all traces of labor in film production. Whether it is the sound editor removing noise that may 'distract' the viewer or the director casting 'convincing' actors, the movie is crafted in such a way as to leave no traces of its concrete making, thereby remaining at the entire service of the story's enchantment. This is, as it were, the 'magic of movies', using Gell's notion of magic as 'ideal, costless, production' (1988: 9).

This view is evidently discordant with the effort, anxiety, and imponderability involved in the film's artistic creation, let alone its logistical and 'technical' demands. This imponderability is mediated, as I have argued in chapters 5 and 6, by more or less experienced crew members in a specific division of labor within a specific operational sequence and with specific reserves in hand. All these mediating factors are invisible in the final film product, by the artistic workers' own design, in order to satisfy the expectation that the spectator is awaiting to be enchanted. This invisibility is not solely provoked by the movie in itself, but by its situation at the end of a socio-technical process, executed within the bounds of the industry's division of labor, given a certain distance between filmmakers and their audiences. This raises the conceptual issue of explaining how exactly all this labor is made invisible in the course of production, to which I now turn through an examination of the Marxist notion of 'reification'.

III. Reification

In the vernacular of academic anthropology, the term ‘reification’ is not as widespread as its verbal form, ‘to reify’, which is synonymous with ‘to essentialize’, and is thereby associated with all manners of negative connotations¹¹⁹. To say that culture is reified, in this sense, bears no additional conceptual weight to saying that it is essentialized or objectified, thereby highlighting the misplaced concreteness of anthropological concepts vis-à-vis their empirical referents – e.g. culture as an analytical tool vs. a property of living people. When I talk about reification, by contrast, I mean something more specific and less abstract than the vernacular usage: I mean the ‘forgetting’ of human labor through its inscription in physical mediators in the course of media production.

This conception is not my invention, since it engages with a long intellectual genealogy in Marxist theory. The term ‘reification’ (*Verdinglichung*) was only briefly mentioned by Marx, but its birth as a concept is traditionally traced to Lukács’ seminal essay, ‘Reification and the Consciousness of the Proletariat’ (1971)¹²⁰. The political theorist Pitkin counts five distinct meanings to the term in Lukács’ original essay: ‘1) the misapprehension of relationship as *res* [a thing]; 2) the coming into being of the capitalist

¹¹⁹ This meaning is clear in White’s classical essay on the concept of culture (1959), where he defends himself from ‘reifying’ the abstract elements in culture by arguing for a Durkheimian ontology in which culture, in itself, is a social ‘thing’ (*chose*). Few anthropologists have engaged with the notion of ‘reification’ beyond this ordinary meaning. In his early work, Taussig (1980a, 1980b) uses the term ‘reification’ as an unproblematic equivalent to ‘commodity fetishism’ – i.e. the transformation of social relations into relations between things. More recently, Silva spoke of reification in much the same sense given by Berger & Luckmann, as ‘the universal human tendency to apprehend abstractions as things’ (2013: 80). Based on participant observation among Luvale speakers in Zimbabwe, Silva’s project is to show how reification not only produces ‘inert’ categories, but also ‘animate’ ones, such that reification and fetishism become one and the same.

¹²⁰ This essay has been appropriated in disciplines as diverse as philosophy, psychology, sociology, and literary theory (see Goldmann, 1959; Gabel, 1962; Berger & Pullberg, 1965; Berger & Luckmann, 1967; Williams, 1980; Honneth, 2008). Said (1983) convincingly argued that these appropriations have not only modified the contents of Lukács’ theory, but they have also actively remoulded it to the shape of social, political, and institutional concerns formulated in settings as diverse as 1920s Hungary, 1950s Paris, and 1960s Cambridge. These successive appropriations make the conceptual task of re-appropriating the term in a 2016 doctoral thesis in Oxford all the more complex, which is why I seek to both credit my borrowings to Marxist theory and establish what is distinctive about my use of the concept in this section.

world of commodities and a market whose laws have inexorable power; 3) the manner of conduct of persons that “correspond to” 2); 4) the commodification of persons and of their characteristically human activity; and 5) the forming of the kind of mind that tends to 1)’ (1987: 267). Honneth, on his part, argues that Lukács’ reification is both a process and a result (2008: 53), which involves considering objects, people, and oneself as ‘thing-like’ entities (2008: 22). All these meanings seem confused, and the way in which Lukács deploys the term in his fiery prose cannot withstand much scrutiny without falling into contradiction. What I wish to highlight, then, are specific passages in which Lukács associates his concept of ‘reification’ with commodity fetishism, labor, and immediacy, all three notions being central to my iteration of the concept.

In Lukács’ view, Marx had correctly identified that the commodity-structure is the distinctive feature of modern capitalism; ‘that a relation between people takes on the character of a thing and thus acquires a “phantom objectivity”, an autonomy that seems so strictly rational and all-embracing as to conceal every trace of its fundamental nature: the relation between people’ (1971: 83). As Pitkin remarks (1987: 266-267), Lukács seems to assume that the sheer spread of capitalist relations of production entails the permeation of reification in all spheres of social life – the factory, the state bureaucracy, the juridical system, to give some of his own examples. He implies, by extension, that the subject is always alienated in these *de facto* ‘thing-like’ relations, a position which he recanted in the 1967 preface to *History and Class Consciousness* (1971: xxiv-xxv). In section IV, I will argue that Egyptian filmmakers may or may not be alienated by the concrete hiding of their labor throughout the filmmaking process, but this hiding takes place independently of their feelings, by virtue of its inscription in physical mediators like the scenario, scouting pictures, the film’s audiovisual material, all inserted in a long-term production process.

Lukács and his successors never held a literalist view on the reification of ‘things’ as physical entities, except in passing references to commodity-objects and machines. As Pitkin puts it summarily, ‘To reify is to turn something into a *res* [a thing]. But there the difficulties begin. What sort of something? And how?’ (1987: 264). Leaving the ‘how’ to be answered later in this section, the ‘sort of something’ created by reification has traditionally been an abstraction. In Lukács’ essay, this abstraction is recurrently illustrated with Marx’s classical example of the dissociation between the worker’s concrete labor and his labor-power (1971: 88-90). This separation of labor-power as a ‘thing-like’ entity seems immediately given to both the bourgeois and the proletarian, but Lukács argues that the bourgeois is unable to transcend this immediate reification, since his own interests are implicated by the very idea of labor as a commodity that can be bought and sold. The proletarian, by contrast, has a direct experience of the contradictions in capital (i.e. the dissociation between his concrete work and his labor-power), which may enable him – with an emergent class consciousness – to access the ‘true’, dialectic mediations undergirding his seemingly immediate experience (i.e. the capitalist relations of production that objectify his labor and transform his organic experience of work). These mediations cannot be accessed by merely observing reality, whose reified substance is immediately accessible, but by changing the practical conditions enabling this reality to seem ‘immediate’ – a mission assigned to the proletariat by Lukács, in genuine Marxist orthodoxy (1971: 202-206).

The totalizing economic determinism in Lukács’ theory is unhelpful to explain what happens to workers in film production as opposed to, say, an early 20th-century manufacture. As in any capitalist setting, the Egyptian filmmaker’s concrete effort is dissociated from his labor-power, which is bought and sold according to hierarchically nested hiring practices as described in chapter 1. Yet, there is no sense in which the

‘proletarian’ – that is, every single cast/crew member who sells his labor-power to the producer – is generically affected by the dissociation between concrete effort and labor-power. As I detail in section IV, there are more subtle differences among artistic and executive crew members, as their investment in production is not merely attached to labor-power, but to the artistic product that they are making together. With this caveat in mind, I find Lukács’ argument useful in two respects. On one hand, I find that the socio-technical relations among Egyptian filmmakers do acquire a ‘phantom objectivity’ by being inscribed in physical mediators. On the other hand, I find that film labor is not only reified as a commodity (i.e. as labor-power), but as an organic effort that is ignored by some filmmakers at every juncture in the filmmaking process by virtue of their differential positioning in the industry’s labor hierarchy. My debt to Lukács, in this sense, includes the idea that ‘work’ can be dissociated from the worker (although not just in the sense of a rationalized labor-power), and that this dissociation seems immediately given in things (although I have a more vulgarly materialist take on these things’ thingness).

The example of labor-power is not the only one through which Lukács presents his views on reification, yet his recurrent use of this particular example has been ignored in later appropriations. As a result, the idea that work in particular is transformed into a ‘thing-like’ entity has been sidelined by the idea that ‘humanness’ in general is what gets erased by reified thought. This is clear in Lukács’ reflection on reified consciousness, but it is even clearer in Berger & Pullberg’s attempt to create a non-Marxist notion of reification (1965), culminating in Berger & Luckmann’s *The Social Construction of Reality* (1967)¹²¹, and in Honneth’s rereading of Lukács (2008)¹²². Reification, here,

¹²¹ According to these authors, ‘reification is the apprehension of human phenomena as if they were things, that is, in non-human or possibly supra-human terms’ (Berger & Luckmann, 1967: 106). So far, the definition seems to parallel Lukács’ own, yet it takes a more idealistic tangent in the following line: ‘Reification is a modality of consciousness, more precisely, a modality of man’s objectification of the human world’ (1967: 107). Berger & Luckmann intend to show, on one hand, how the ‘man in the street’ can

becomes a universal anthropological tendency to mistake abstract categories for nonhuman creations when, in fact, they have been created by ‘humans’. But which humans? In what circumstances? To what end? These questions cannot be answered by Berger & Luckmann¹²³ or by Honneth. Thus, to Lukács and his successors, reified representations are thing-like to the extent that they are dehumanized, in the most general sense of not appearing to be man-made. This emphasis on dehumanization is meant to loosely criticize contemporary capitalist society (Pitkin, 1987: 263-264), although these interpretations remain on an abstract level, without examining concrete settings, let alone concrete work processes and their socio-technical qualities as I have done throughout this thesis.

As I see it, however, reification is a concrete forgetting of the concrete effort invested in the making of physical mediators, which seem to me more ‘thing-like’ than the representations examined by Lukács and his successors. I have already acknowledged my debt to Lukács’ discussion on reified labor and its immediate experience, but I wish to acknowledge Honneth’s contribution to my view of forgetting. Expanding on Horkheimer and Adorno’s cryptic remark in the conclusion of the *Dialectic of Enlightenment* – ‘all reification is a forgetting’ – Honneth argues that the forgetting of recognition is not an unlearning of a basic anthropological necessity, but an inattention to this necessity given overbearing reified representations (2008: 58-59). Honneth avoids the pitfall of arguing that reification is literally a misapprehension of reality, which Pitkin terms ‘the vexing

misapprehend social reality as a set of objective or immutable categories, and on the other, how social scientists can create ‘reified’ models of society that erase their empirical grounding.

¹²² According to Honneth, the transformation of social relations into ‘thing-like’ relations is attributed to inattention to the priority of ‘recognition’ (*Anerkennung*) as a kind of empathetic bond grounding all sociality. While being more attentive to the actor’s situated subjectivity than Berger & Luckmann, Honneth still conceives the thing-like character of reification as an abstraction, which makes the actor ignore the anthropologically prior recognition whereby s/he interacts with his/her world, his/her peers, or him/herself.

¹²³ When Berger & Luckmann talk about ‘reified’ representations, there is no way to know under what circumstances the same reified ‘thing’ – say, the role of stylist in the Egyptian film industry – can be conceived as a modifiable social role vs. a nonhuman social fact. In the case of the Egyptian stylist, for instance, the degree to which the role is ‘reified’ depends on one’s position in the industry. To the experienced line producer Ahmed Farghalli, the role is a superfluous creation, designed to give more jobs to people who ‘do nothing’ necessary to film production; to the young stylist Salma Sami, it is a concrete role ‘imposing’ certain responsibilities on her concrete work tasks.

puzzle of how one can misapprehend as objective what is in fact objective' (1987: 269). While Lukács remains ambiguous about the nature of the misapprehension involved in reification (is it an ontological inability to reach the 'truth' or a subjective mistake?), Honneth argues that reification is a 'misapprehension' only to the extent that the priority of recognition is not acknowledged. This is not to say that its very existence is denied, but that it is ignored by historically situated social agents.

To put it in the terms of my fieldwork, the 'forgetting' involved in reifying the work of film production is not literally an obliviousness to the objective human beings involved in the objective process of making films, but a *de facto* inattention by some workers to the concrete work invested by other workers in film production, largely by virtue of their position in the industry's labor hierarchy. This misapprehension cannot be lifted by merely indicating that reified mediators are made by 'humans'. This cannot, on its own, 'undo' reification as I have defined it, because reification cannot strictly speaking be undone. Conceivably, however, it can be mitigated by various ways of recognizing labor, as I explain in section IV. What is at stake, here, is whether I am describing something specific to Egyptian film production, or even to film production in general, by contrast with any complex socio-technical activity¹²⁴. I have little data beyond my fieldwork to speak to this issue, but I would surmise that the workings of reification are not very different in other global media industries, where indeed the labor of what I have called 'executive' workers is rarely highlighted except by industry insiders or by scholarly accounts (see, in Euro-American industries, Caldwell, 2008; Mayer, 2011; Hesmondhalgh

¹²⁴ There is a political stake in the question as well: are the workings of reification linked to the historically situated forms of casualized wage labor evident in contemporary Egyptian film production? In an orthodox Marxist framework, there would be no doubt that the lack of recognition for the labor of 'executive' workers, as I describe in some detail in the next section, would be immediately linked to their alienation and, by extension, their objective social relations of production. However, I wish to maintain a distinction between reification and alienation precisely because both are experienced in separate ways in Egyptian film production. In a context where casual work is still better than no work, the fact that one's labor might be forgotten is a disagreeable occurrence which, nevertheless, needs to be dissociated from one's attachment to the possibility of being employed in the industry at the expense of personal recognition.

& Baker, 2013). However, the forgetting of labor in the course of film production is not without apposite discourses of recognition which are, I would argue, specific to media production if not to the Egyptian case. In other words, the ways in which labor is nominally recognized in a complex production process are, perhaps, what distinguish the engagement of social agents with the ‘inevitable’ forgetting of all labor previously expended in their respective production processes. In section IV, I will detail these ways of recognizing labor in the Egyptian film industry, but I would expect some variation across media industries in terms of the specific manner in which recognition is given and felt by workers in their daily activity.

In short, what I mean by ‘reification’ is best understood as a *de facto* inattention to the concrete work invested by some filmmakers in the making of physical mediators (not their abstracted meanings) in film production. Each moment of reification involves three main parties: 1) the ‘reified’ worker, who invests concrete effort in making a mediator; 2) the mediator itself; and 3) the ‘reifying’ worker, who ‘forgets’ the work invested in the mediator, in the very act of using it in her own work. In scouting, to take a concrete example, legwork production crew members like Setohy expend concrete effort into gathering scouting pictures across Cairo. This labor, materialized in the scouting picture, is ignored by artistic crew members at the very moment in which they look at pictures to select an aesthetically appropriate apartment and to visualize the film’s appearance. The work expended in gathering all scouting pictures is ‘reified’ in these very pictures by the ‘reifying’ artistic crew who, by virtue of their role, are led to ignore Setohy’s effort and consider scouting pictures as purely visual artifacts, which approximate what ‘the film’ will eventually look like.

The physical presence of mediators objectifies the cumulative labor invested in the course of film production. It is as though ‘the film’ were made by a series of things –

scenarios, scouting pictures, props, audiovisual material, and software. No doubt, this impression is ethnographically incorrect. It is as clear to the anthropologist as it is to the production manager that scouting is not just a series of pictures, but a very exhausting task that involves running around Cairo to photograph, in detail, several apartments in several neighbourhoods through unenviable traffic conditions. Likewise, scenario breakdowns are not a mere set of Excel sheets on the AD's computer, but a lengthy and meticulous task that involves writing and reviewing the scenario to identify and inscribe all elements needed to make the film. The basic point is that, although this labor may be nominally recognized as I describe below, mediators are treated as mere objects when they are *passed on* to crew members whose jobs are predicated on considering them as mere objects.

Crucially, reification is never a 'one-off' instance in which social agents immediately perceive mediators as inert objects, but it recurs throughout the production process. Reified labor is re-reified at every stage, even as reified labor and reifying social agents come to be resituated. For instance, the scouting legwork invested by Setohy to produce scouting pictures in *Décor* was reified by Ahmad Abdalla and his artistic crew when they came to choose Sharif and Maha's apartment. Then, the whole work invested by the art directors Asem Ali and Nihal Farouk and their team to design Sharif and Maha's apartment is re-reified by Ahmad Abdalla when he decides to modify the set in a given take. Lastly, the whole socio-technical effort invested in the take is re-re-reified by the image editor Sara Abdalla when she decides to exclude entire scenes in editing. Instances in which labor is reified are therefore serially enfolded in a manner reminiscent of Gell's Strathernograms¹²⁵.

¹²⁵ Reviewing *The Gender of the Gift*, Gell exposes his understanding of Strathern's basic premise – i.e. that all social relations are based on gendered exchanges in Melanesia – through a series of diagrams illustrating symbolically enfolded interactions in which earlier exchanges are 'eclipsed' by later ones. A ceremonial pig exchanged for the first time 'eclipses' the gendered work involved in the pig's reproduction, both between the pig's progenitors and the pig's owners, and through every exchange the ceremonial pig comes to eclipse all previous exchanges between donor and recipient (1999: 47-49).

IV. Reifying and Recognizing Film Labor

A) Reification as 'part of the job': Inattention to reified work is justified as being 'part of the job' (*heyya dih el-sho8lana*). This truism can be taken to connote two important aspects in reification. First, as I explained in section VI of chapter 3, each worker has a different knowledge of the overall process of film production, such that his 'job' may seem like a given set of tasks, imposed by a hierarchical superior, and unfolding as part of a predictable operational sequence. In this respect, some workers may not only be inattentive to the work expended by other crew members, but they may literally have no idea what this effort entails. As I have mentioned in chapter 3, the experienced mixer Mohammed Fawzi attributed the pressures imposed by production crew members on the time he is allotted to edit and mix sound to the production's selective inattentiveness to postproduction work and its technicalities. To take another example, the cinematographer Tarek Hefny told me that he has no idea how his gaffers rig certain spotlights, but he is happy with his crew because their work produces a quality image. To put it otherwise, Hefny may have no idea what concrete work was expended by his gaffers in rigging lights, but what counts is how their work is reified in the film's image by the artistic crew on set. The artistic crew thereby 'forgets' the very physical labor of carrying and rigging spotlights in their attempt to visualize what the shot will look like in the final film. To be fair to Hefny, he was recognized by his own gaffers as an understanding boss, as he himself tried to make sure that his team did not get too tired by their exerting physical labor, but this nominal recognition does not impact the basic workings of reified labor.

Reification is ‘part of the job’, secondly, because some workers are bound to be both ‘reified’ and ‘reifying’ at different stages of production according to their position in the industry’s division of labor. This dual situation is evident in the case of image editors. In interviews with several experienced editors, I was not surprised to find that they did not like to spend time on location, in shooting, because they preferred to gain some distance from it to remain dispassionate when it came down to cutting out entire angles or scenes. The well-known editor Mona Rabie felt that she had great responsibility towards the effort (*maghoud*) expended by the cast and crew in shooting, but she also had to do what is best for ‘the film’ (even by removing whole chunks of hard-earned material). While ‘reifying’ the work invested in shooting, the editor’s work is in turn ‘reified’ in the film, insofar as her work is deemed to be ‘good’ when it is imperceptible – that is, when the imagined spectator can only be enchanted by the seamless flow of narrative as described in section II. While this relation between ‘reified’ and ‘reifying’ workers is not exclusive to Egyptian film production, and could indeed be seen in a number of media industries, it is dictated by the operational sequence specific to the Egyptian film projects that I have witnessed. Reification, indeed, is *unidirectional* in the sense of sequenced operations: the set craftsmen reify the work spent in producing a set design when building the set; the director reifies the work expended in building the set when taking (or omitting) a shot; the editor reifies the work spent on set when selecting (or omitting) a take; and so on. Thus, the reified and reifying worker may be, successively, lower-end and higher-end crew members, or artistic and executive crew members. The teleological character of the socio-technical operational sequence is the essential metric to describe how reification works, serially, throughout the production process, by determining whose work is reified when.

B) Alienation: To reified workers, instances of reification are not alienating *per se*, although their recurrence may provoke explicit or, more likely, implicit blame on the reifying worker. The artistic worker's inattention to the work done by executive crew members is deemed upsetting in this sense. When we were still scouting in *Poisonous Roses*, the production manager Edward Nabil would constantly complain that he had neither the time nor the money to visit all the neighborhoods in which he made scouting appointments. He would always ask, 'Aren't these apartments good enough?' (*el-sho2a2 dih mesh kwayyesa?*). By 'apartments', he meant the scouting pictures that he gathered every day. As I explained in chapter 6, these pictures were never 'good enough' to Fawzi, who was looking for a specific 'minimalist' style not evinced by Nabil's pictures. With recurring pressure to scout ever more, Nabil would tell me that he was physically and mentally tired. He felt like Fawzi made unreasonable demands without recognizing all the work that he invested in scouting. He would even say things like, 'If only he knew what I am going through...' In this case, the moments of reification where the work invested by Nabil seemed to be forgotten by Fawzi led to Nabil's gradual fatigue and his ever increasing complaints on the job.

The link between reification and alienation is not always so straightforward, as illustrated by the work of executive crew members in artistic teams. In *Décor*, when we were shooting in Mostafa and Maha's apartment in Garden City, the art direction team took one or two days off to rearrange the apartment's design. In the scenes about to be shot, Maha's taxi driver husband Mostafa had always been single in an alternative world, where Maha was always married to her art director husband Sharif. In preparations, the design of the celibate Mostafa's apartment included a room where he stores vinyl discs. In the few days allotted to rearranging the apartment in the shooting schedule, the art direction assistants and the prop team took it upon themselves to cut around 7000

cardboard record sleeves according to the assistant decorator Mohammed Ezzat. These sleeves were supposed to furnish the vinyl library in Mostafa's room, which they did, with the expectation that the library would be seen in the movie.

On the shooting day, however, Ahmad Abdalla decided to take only one angle in which the library (with all sleeves) was only partially visible. Thus, all efforts to make the library look furnished were rendered vain by the director's artistic decision to exclude all angles in which the record sleeves would be visible. In the end, they did not appear in *Décor*. This, in turn, might have led to a conversation between the art director and the director about the necessity of these props in the image's composition, or even a dispute over the unpredictability of the director's shooting script, although this conversation did not happen in this particular instance to the best of my knowledge. Ezzat was still upset because his props, objectifying two days of labor with his whole team, were forgotten by the artistic crew *and* did not appear on camera, in 'the film'. This example illustrates the double bind of executive work in an artistic team. While Ezzat's (and his team's) concrete efforts in making sleeves would have been reified in the audiovisual material in any case, the fact that these covers did *not* make it in the film was especially painful to Ezzat because his work is only made *visible*, is only recognized in other words, by being included in the film.

This example introduces an important distinction between the recognition of executive work in artistic teams and executive work in non-artistic teams, as evinced by Nabil's complaints. This contrast is perhaps better illustrated with this brief vignette. I was sitting in New Century's office with the art directors Asem Ali and Nihal Farouk as they were exchanging ideas about props to be acquired in upcoming scenes, while showing each other '*reference*' images on their smartphones. Suddenly, the line producer Ahmed Farghalli interrupted in the office. He sat right across from Ali and Farouk, with his usual

snarl, and started discussing the budget allotted to the art direction team, which had been largely exceeded according to his calculations. The art directors were still strongly pleading to secure additional funds, but Farghalli was inflexible. After a vivid discussion, Farouk jokingly tried to convince Farghalli to invest ‘for the sake of Art’ (*3ashan el-fann*). Farghalli immediately replied with his own quip, ‘What do I have to do with Art? I’m the line producer of this film. Do you remember any single line producer in any film?’ Visibly surprised by Farghalli’s answer, Farouk tried to mumble a response, but Farghalli insisted, with a smile, ‘I’m the line producer in this film. Who will remember it?’

Farghalli’s wisecrack concluded an allegorical debate between business and art; an often revisited debate in the history of commercial film production. As Powdermaker remarked, ‘Perhaps the most fundamental and striking characteristic of the motion picture as an institution is that the making of movies is both a big business and a popular art’ (1950: 25). The debate above was temporarily won by the business side, since the art directors were unable to extract a single penny from Farghalli – at least, in the conversation’s immediate aftermath. Nevertheless, the incident’s interest lay not so much in the negotiation between Farouk and Farghalli, where two different regimes of value (financial and artistic) were invoked, but in Farghalli’s justification to refuse to invest. Since the line producer – and, by extension, his work – will not be remembered, he has no interest in improving the movie’s artistic quality, especially when this improvement hurts his own interests (as a budget watcher). Likewise, since the art directors’ work will be visible in the final film (i.e. with their set design), they have great stakes in improving the film’s appearance, even if this translates into an additional financial or logistical burden on the production team. Farghalli is very clear that his work as a line producer would never be recognized in the final film, since it is not *visible* in the film.

C) *Recognition*: There is a recurring rhetoric of recognition in the Egyptian film industry, based on acknowledging the ‘humanity’ of forgotten workers. While this rhetoric is insufficient to entirely dispel the workings of reification, it illustrates how the problem of recognition is pondered in practice by Egyptian filmmakers. In many cases, workers at the bottom of the labor hierarchy are nominally recognized by superior crew members as an ‘unknown soldier’ (*gondi maghoul*). To take a concrete example, Farghalli would regularly vaunt Mondy, his location services man, as an ‘unknown soldier’ who was to be recognized – as he would tell me – through my academic work. This metaphoric recognition is better understood as a nominal *a posteriori* credit given by hierarchical superiors to their subordinates, much like heads of state memorialize the ‘unknown soldier’ sacrificed at war. In *Poisonous Roses*, Fawzi expressed his gratitude to Nabil as well as the entire crew, while apologizing for the difficult conditions under which the movie was being made. While I am personally convinced that Fawzi is among the most ‘worker-friendly’ directors in Egypt, both in talk and in action, this rhetoric of recognition did not translate into concrete improvements in the workers’ labor conditions. Moreover, this rhetoric is not the accepted means through which labor is recognized by insiders to the film industry.

The beginning and ending credits stand as the primary token through which all cast/crew members are recognized as part of the ‘artwork’ (*el-3amal*), as they inscribe the names of all participants in the movie. Farghalli’s production team was careful to track all cast/crew members who participated in *Décor*. In the final shooting days, I saw the production assistant Khaled Labanita going around the location with a sheet in hand, asking the heads of each team and sub-team to write the names of those who participated to the project, in order to be properly credited. Crediting is not as straightforward as it seems: some workers are systematically ignored in credits (most notably extras), while

those workers who only briefly intervene in the production process can be ignored or willingly excluded from the credits (although crediting may be negotiated in these cases).

Moreover, job titles are a great subject of negotiation, since they both inscribe the hierarchy in each team while giving leverage to lower-end workers in order to claim a ‘higher’ title. As I was told by production workers in New Century, the job title of ‘location manager’, for example, emerged because too many workers could lay claim to the status of ‘production manager’. Thus, an intermediary designation emerged between the production manager and the production assistant to satisfy a hierarchical requirement. This is why job titles vary in every project, even if the interpersonal rankings remain stable and known within a given team. To take a concrete example, Setohy was a production manager in *Décor* because he was the most senior worker next to the line producer Farghalli; when Farghalli hired back the more experienced production manager Tamer Fathi in *The Cat and the Mouse*, however, Setohy took the rank of ‘location manager’.

While credits are not always taken seriously by non-insiders to the industry, especially when they swiftly dash at the end of the movie, they are taken very seriously by all industry insiders. Being credited ensures, in principle, that the non-syndicated worker will have a right to join the Film Syndicate once he cumulates the necessary three contracts. More importantly, being credited guarantees that the worker will have a tangible product to show his previous work when it comes to establishing his skill (*shatara*) and reputation (*som3a*) in the industry, both elements being indispensable in securing further employment in a horizontally integrated industry (see chapter 1). Credits, in this sense, are a kind of signature, and film workers take great pride in having their names included on them. To take an extreme example, the line producer Farghalli was once watching a movie in which he worked but, when the end credits started appearing, the projectionist shut off the movie as all moviegoers were leaving the theatre. In rage, Farghalli went up to the

projectionist and forced him to replay the whole ending credits, which he watched on his own, in the empty movie theatre, to his great satisfaction¹²⁶.

While executive workers only have credits to be recognized, artistic workers are additionally recognized by their work on some aspect of the image/sound in the film product. This is not necessarily clear to non-insiders in the industry, but it is very important to insiders, who comment on the ‘work’ (*sho8l*) done in other movies by praising the D.O.P.’s image, or by criticizing the art director’s set, or by arguing over whether the actor’s performance was convincing or not. This kind of movie analysis, streamlined according to each artistic worker’s intervention in a project, does not necessarily take into account all the actual work invested in making this product. Moreover, as I illustrated in section II via Nader’s amazement with the Indian movie, it is not infrequent for filmmakers to speculate about the way in which a particular shot or a particular scene was made in an Egyptian movie, combining both guesses and gossip about its makers. These speculations notwithstanding, the actual work done by each artistic team (including its executive workers) is seen to be recognized in each divided element in the film’s image/sound, which explains why the assistant decorator Ezzat would be more upset to have his work invisible in the final film than to have it ‘forgotten’ in the course of production.

Recognition – or lack thereof – in the final film is what drove explicit feelings of alienation in my experience, and rarely the reification of film labor in the course of production. Since ‘being recognized’ is a matter of hierarchy and artistic visibility, *not*

¹²⁶ That said I have encountered several crew members (including, in *Décor*, the production manager Setohy, the best boy light Mohammed Desha, the clapper-loader Abdelsalam Radwan, and the video-assist Adil) who expressed a certain lack of interest in watching the movies that they make. This may partly be a matter of taste, since crew members may not work in movies that they like to watch. My feeling, however, is that this lack of interest – just like Farghalli’s indifference to artistic considerations in *Décor* – is compounded by reification. Labor expended in filmmaking is serially forgotten throughout the film’s production process, and above all in the final film, which comes to seem distant to the very crew members who made it.

being recognized can be interpreted as a lack of professional respect or artistic integrity. I would argue that these two problems are experienced throughout the production process and, more importantly, not just in moments of reification. For instance, a musical composer once told me that a producer urged him to modify his soundtrack so as to ‘make people dance’ (*yra22as*) when they see the movie in the upcoming Ramadan season. The producer’s comment, in this case, was interpreted by the composer as a lack of respect to his artistry. While his soundtrack would have been reified in any case in the final film, his own original work would not be recognizable. This was enough to provoke his anger as an artistic worker. Notice, here, that in the name of an audience imagined to be singing and dancing in theatre halls, the producer sought to bury the composer’s labor in order to materialize the film’s expected enchantment. What to the composer remained an imponderable audience of listeners, who are all ears to his new composition, became a concrete set of singing and dancing viewers in the producer’s imagining. With this audience in mind, as well as the attending expectation of ‘enchancing’ it with a ‘dancing’ soundtrack, the producer precipitated the composer’s lack of recognition. Thus, the visibility – or in this case, the audibility – of artistic work in the film comes to be a major criterion for recognition in the Egyptian film industry, although access to this means of recognition is cleaved according to the divide between artistic and executive crew members.

V. Mediating the Audience’s Imponderability

To the Egyptian filmmakers with whom I worked, the imponderability of the audience is mediated by several assumptions and mediators. First, there is an active representation of

the audience's sociological profile according to what Ganti calls 'production fictions'. Second, there is an active inscription of an audience imagined to be 'enchantable' in the socio-technical activity of filmmaking. Lastly, there is a necessary reification of the labor invested in making this enchanting product. When artistic crew members try to mediate the imponderability involved in visualizing 'the film' (see chapter 6), or when executive crew members try to prepare and execute an upcoming shooting day (see chapter 5), the mediators that they use obscure, in their very use, the work invested in making the film. This is meant as a very physical argument insofar as the *act* of visualizing the film or coordinating the shooting with the help of various reserves *presupposes* that the artistic worker is summoned to the incoming future of his task, without attention to the concrete labor encapsulated by his mediators. This situation is certainly not unique to Egypt or to the Egyptian film industry, although the audience's 'enchantment' and the worker's professional recognition are articulated by my interlocutors in ways which, as I highlight in sections II and IV, seem specific to the Egyptian context.

What I have described as 'reification' is a central aspect in any complex production process. Independently of the worker's feelings of alienation, it seems to me that the sheer complexity of film production, extending over several months with several workers 'passing on' their work in successive stages, can explain why reification is a natural corollary to socio-technical processes as diverse as making a movie, building a boat, or writing a thesis. With their limited cognitive capacities, the filmmaker, the boat-maker, or the doctoral researcher can never possibly hold in mind everyone involved in the whole process which results in their respective products. Emphasizing a cognitive limitation would be reductive, however, since the distance between the filmmaker and his work is situated in a particular context where reification is a central condition of the 'enchantment' of the imagined audience. Thus, filmmakers contribute to breaking down the overall

imponderability of the audience's reaction over several moments of reification in production. In a sense, reification is consummated when the imagined viewer watches the film. The total labor invested in its making is 'forgotten' by the viewer, in the very act of watching it, in order to be enchanted by the seamless narrative. This imagined viewing, again, is not representative of empirical audiences and their interaction with the film product, as I have mentioned in section II, but it is integral to the way in which Egyptian filmmakers mediate the imponderability of their audience's composition and reaction.

Concluding Remarks

This thesis makes three core contributions to the anthropology of media and mediation. First, it is an embodiment of the importance of long-term participant observation in the study of media production practices. Being the first study of its kind in the Egyptian film industry, it makes a situated contribution to the understanding of this influential industry's interpersonal political economy (see chapter 1), its labor hierarchies (see chapter 2), and its socio-technical production process (see chapter 3). Secondly, this thesis brings attention to an empirical aspect of media production that is underplayed in media anthropology, i.e., the concrete use of technological objects *in the course of production* (see chapter 4). Although it may have been tempting to 'purify' the filmmaker-subject and her use of technological objects (Latour, 1993), I have maintained that the articulation between the filmmaker's imagination, her social interactions and, crucially, what I have called 'reserves' allow her to be summoned, in the present, to work on near-future/far-future issues. The distinction between objects and reserves is an important analytical tool in this sense. On one hand, it does not deny the reality of *teknologia* as a set of commodity-objects, which is how it is generally conceived in contemporary Cairo. On the other hand, it allows the anthropologist working on media to examine how these objects are physically involved in media production. With this methodological resolve to examine technological objects/reserves, I believe that I have provided a more exhaustive account of the ways in which Egyptian filmmakers work through their everyday problems, beyond the confines of individual cognition and sociological organization, into a proximate engagement with technologies in one's immediate surroundings.

Finally, this thesis has begun to explore a matter of great theoretical import to the question of mediation: namely, how people mediate between the present and the future of a socio-technical production process. This thesis has been attached to a particular case – i.e. commercial film production in Egypt – yet I believe that the analysis speaks to a wider range of contexts, whether in other media production sites or, perhaps, in manufacturing/creative industries more broadly (e.g. shipyards, universities). As I have suggested, Egyptian filmmakers mediate many imponderable problems in their daily work: how to plan and execute a shooting day (see chapter 5), how to visualize the final film (see chapter 6), and how to imagine their potential audience’s composition and reaction (see chapter 7). While imponderable at first, these problems are mediated by various well-honed assumptions and mediators, including the Egyptian filmmaker’s situation in a postmillennial industry marked by interpersonal hiring patterns and modes of apprenticeship; her insertion in an accepted division of labor within an accepted operational sequence of production; and her manipulation of technological objects serving to summon various mediating images and writings. My theoretical contribution, here, has been to detail how all these assumptions and mediators combine to break down imponderable problems into contingent elements, with more or less success, but without an immediate or lasting resolution. This contribution is significant because it adds an important temporal layer to the many existing studies of media production in anthropology. In most cases, with exceptions like Grimaud’s work in Bollywood (2003) and Hoek’s work in Dhallywood (2014), media production is written about in an *a posteriori* mode, as though media producers knew what would happen all along, without considering how media workers themselves are constantly anticipating, here and now, what will come next in their activity.

Being grounded in a specific ethnographic case, my theoretical contribution is articulated with the very real anxieties of workers in the Egyptian film industry in mind. In chapters 5 to 7, I have examined the ways in which executive and artistic crew members think through the logistical and artistic imponderability involved in the filmmaking process. I have argued that this imponderability is mediated via an accepted division of tasks in a given labor hierarchy; a concept of the operational sequence of film production; as well as the physical use of various technological objects acting as reserves. I am confident that this argument can be well defended in the ‘incoming futures’ discussed in chapters 5 to 7, whether between planning and executing a shooting day, or between imagining and making the film, or between anticipating and entextualizing the audience’s composition and reaction.

The contributions made by this thesis have been staked in the negative, by arguing that it fills some gaps in a literature which, arguably, is still growing and will present many gaps to whoever is looking. But what, in a more positive sense, are the core themes permeating this thesis? How can we connect its empirical content with its analytical insights? I wish to end on some points of connection which, I believe, are central to what this project has sought to achieve. First, throughout the thesis, I have highlighted the concrete work exerted by Egyptian filmmakers in their everyday activity as a central area of investigation into the industry’s workings *and* as an analytical resource to understand the anticipation of incoming futures. The former is perhaps unsurprising to media anthropologists, who will have been acquainted with the importance of working relations in media production through the works of Wilkinson-Weber (2005; 2014) or Ganti (2012), among others. Beyond valuing labor roles and hierarchies as inescapable aspects of the lived experience of filmmakers, this thesis attempts to expose how specific types of imponderable problem are mediated by specific roles and hierarchies – how, for instance,

directors are much more concerned by what actors perform on screen in film preparations than by how actors will physically get on location. Both operations are *a priori* necessary to the film's making, but by virtue of a specific division of labor, each problem is systematically assigned to a different type of social agent and, by extension, these agents are engaged in anticipating different types of incoming futures – e.g. will the actor look good on screen vs. will the actor arrive on time on location.

This thesis illustrates, moreover, how labor roles and hierarchies effectively ground a classical concern in film studies, i.e., how a movie is imagined by its makers. Without assuming a certain aesthetic theory or committing to an essentialist distinction between 'technical' and 'creative' work, this thesis shows how technical and artistic workers are bound by hierarchy in Egypt, while remaining equally confronted to the imponderability of the filmmaking process. Thus, highlighting the 'reified' labor invested in the film is not just a matter of academic interest or poetic justice, but a way of exposing how, at every juncture in the production process, with every decision made by a technical or an artistic worker, some measure of 'creativity' – in the loose sense in which the term is employed to designate the craftiness of social agents – is involved. So far, I have carefully avoided using the term 'creativity' except as an emic category, because it essentializes a distinction between 'creative' and 'non-creative' in ways that I have systematically ascribed to a matter of hierarchy. Simply put, a director is not 'creative' because he is better at 'creativity', but because he is part of a labor hierarchy that systematically assigns any decision s/he makes to an artistic intent. Conversely, this means that gripping technicians are not 'non-creative', because their labor involves the kind of craftiness usually associated with the loose meaning of 'creativity', *and* they contribute to the artistic crew's 'creation' by mediating one aspect of the film's imponderability – i.e., how to produce smooth camera movements.

More broadly, this thesis makes a reflexive claim about the way in which knowing the filmmaking process, whether in anticipation or *a posteriori*, varies according to one's position within the industry. This is yet another reason why concrete working hierarchies are a crucial component in understanding film production in Egypt, but it is also why empirical attention to the wealth of institutions, roles, practices, technological objects, etc., constituting the industry is essential to specifying what is considered imponderable by various Egyptian filmmakers. Thus, the issue is not simply to 'use' the empirical descriptions in chapters 1 to 4 in order to analyze a mediation whose terms were always there to be analyzed, but to acknowledge that the object of analysis will vary whether one chooses to follow production legworkers, creative crew members, or gripping technicians. It would have been tedious to run through each and every worker's position in order to show how it inflects his/her apprehension of the incoming future, yet the examples presented in chapters 5 to 7, combined with the rich description given earlier in the thesis, gives some sense about the range of analyses one might have produced to capture the everyday apprehension of the filmmaking process by various social agents.

Lastly, this thesis stands as a testimony to the importance of technological objects as empirical artifacts and as analytical resources in the anthropology of media production. Bringing 'technology' into any conversation on media summons the spectre of technological determinism vs. technological 'possibilism', in Ingold's terms (1997), but both positions have been widely criticized (see Lemonnier, 1992; Latour, 1988; 1993). This thesis is the logical extension of this critical movement, and it substantiates its basic critical stance by conscientiously highlighting how, in everyday working practices, media production occurs through various assemblages of humans and nonhumans. This point is well established in academic discussion on technology, but what this thesis has deepened is an attention to how technological objects are invested with an anticipatory potential – a

potential which, in complex long-term processes like making a film, acquires especial significance. It is not a matter of arguing that technological objects determine what will happen in this process or serve as an invisible substratum to what would have happened in it anyways, but to track how technological objects summon a certain incoming future to social agents; and how, in turn, these agents respond to the future thereby modified. In its broadest sense, this project connects an empirical interest in everyday technological use to an analytical interest in categorizing the kinds of futures navigated by social agents. I hope that this thesis has given some insight into this project, while describing the empirical workings of film production in Cairo.

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