6 "Being a Little Bit Pregnant"

Temporality and the Pragmatics of Uncertainty and Hope in In-Vitro Fertilization

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> Auch Hoffnung existiert nicht in einem sozialen und historischen Vakuum, sie hat immer eine Geschichte, und die Tragfähigkeit jeder Hoffnung hat viel mit dem Konsens zu tun, der über diese Geschichte herrscht und im Austausch und Gespräch weiterentwickelt wird.
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> Hope too does not exist in a social and historical vacuum, it always has a story/history, and the bearing of any hope has a lot to do with the consensus that prevails about this story/history and is advanced in exchange and discussion.
> *(Kinsky 2023: 34, my translation)*

Introduction

When my colleague Monika Lengauer and I were deeply immersed in ethnographic fieldwork for our study on how users of assistive reproductive technologies (ART) deal with these technologies in Austria (Hadolt and Lengauer 2003; Hadolt 2005), we always felt the urge to tell each other about the things that had just happened. Whether accompanying our informants to a medical appointment or talking to them about past events and future plans, we felt this need to share experiences whenever one of us left the field. We met at the hospital's café after saying goodbye to our informants or talked on the phone later in the evening, marvelling about the amount of work, suffering, and money users of In-vitro fertilization (IVF) put in. We were struck by the determination and dedication with which the couples we worked with

worked through all required medical procedures over and over again, enduring pain and failure while pursuing their ultimate goal of having a baby and starting a family. They often invested their entire vacation time and all their savings and often risked the breakup of their partnership, all the while knowing all too well that the outcome was uncertain. Through dramatic ups and downs, pondering upon what might be the case medically speaking, pragmatically weighing up the options and imagining the—hoped for or feared—outcome of these options, for better or worse and sometimes against all odds, they maintained hope that all would turn out fine as they underwent another IVF treatment. In the one and a half years in which we followed these couples in their engagement with ART treatment, this hope has been fulfilled for some, but not for others.

Among the well-known ethnographies in medical anthropology that deal with such predicaments of suffering and uncertainty is Susan R. Whyte's (1997) *Questioning Misfortune.* Based on long-term ethnography, Whyte explores the ways how the Nyole people in eastern Uganda make sense and deal with misfortunes, such as sickness, marital problems, and death. Drawing on the work of John Dewey and other proponents of American pragmatism, she contends that Nyole respond to misfortune and the associated uncertainty with a pragmatist stance, prioritizing the actions taken to alleviate misfortune and the consequences of doing so over convictions. "For acting subjects," Whyte concludes more generally, "dealing with misfortune is a process of apprehending uncertainty, questioning experience, considering terms of action, implementing ideas, and looking to the results"; she continues: "You try, consider consequences, doubt, reconsider, revise your purpose perhaps, hope, and try again. In the process, you may never achieve certainty, though you may gain some degree of security" (ibid.: 224)—our informants could have expressed their experience in their quest for a baby in a similar way.

The situatedness and intentionality that define such pragmatics of uncertainty are also recognized in in the above epigraph. In her poetic essay *Gedankenspiele über die Hoffnung* (*musings about hope*) German writer and translator Esther Kinsky (2023) explores hope through five motions. They range, among others, from her father's induced coma after a failed heart surgery, a state "without hope", thirty years ago, to an analysis of Emily Dickinson's poem *Hope is the thing with feathers* "that perches in the soul", to a contemplation of *Hoffnung* (*hope*), the title of a poem by Friedrich Schiller. In the fourth motion—from which the introductory quote is taken—Kinsky examines Homer's Odysseus' hope for returning home when he recounts his odyssey at King Alcinous' banquet. In telling his story, Kinsky argues, Odysseus formulates a past through a retrospective present that engenders a hopeful, if uncertain, future. Significantly, Kinsky uses the German word *Geschichte* which has a double meaning, in the sense of an individual story to be told, but also in the sense of a more general history, perhaps best translated as *narrative*. The bearing of hope, Kinsky asserts,

rests on the bearing of such a double-faced *Geschichte*, which is to be socially shared and advanced as time passes to become real.

In this chapter[1], I set out to explore the stories/narratives, unfolding over time, in which IVF users (and their medical professionals as well as ethnographers) are enmeshed as situated and purposeful actors and participants in social practices related to ART along the lines of the pragmatics of uncertainty and hope. For reasons of space, I focus on the final phases of IVF treatment, embryo transfer and implantation, and leave out how hope and uncertainty play out in earlier IVF phases and outside the clinic in the homes of IVF users, in media reports, on IVF clinics web pages, in self-help groups, in ART medical tourism advertising, and in policy-making.

I start from the assumption that affects and emotions are to be understood as happening relationally between people (and between people, non-human organisms, more-than-human beings, and things) and as an intrinsic part of the social, rather than as private mental or somatic states of feeling (e.g. Ahmed 2004; Collu 2019; Reckwitz 2016; Wetherell 2012). From a praxeological perspective (Schatzki 1996; 2002), I argue that hope, as a feeling and as a power technique that makes things happen, plays a crucial role in holding together and co-ordinating the manifold doings and sayings (and by extension the involved human and non-human participants) that constitute IVF as a social practice.

A note on the study and its participants

The empirical material discussed in this chapter comes from ethnographic fieldwork that Monika Lengauer and I carried out between spring 2000 and autumn 2002 as part of the above-mentioned research project (Hadolt and Lengauer 2003; Hadolt 2005). The bulk of our data relates to eight case studies of involuntary childless couples whom we followed over a period of 18 months in their quest for a child of their own by using ART. During this time, we accompanied them to their clinical appointments at the IVF outpatient clinic of a university hospital in Vienna and at other private ART clinics and visited them at home for regular interviews. My analysis in this chapter draws heavily on the analysis we conducted in this research project. It is an effort to deal with this material with a fresh look.

The female participants were between 27 and 42 years old, and the men were between 30 and 52. Apart from one couple from Belgium, all participants had Austrian

1 An early version of this chapter was presented at the XI Medical Anthropology at Home (MAAH) Conference, held at the Schüttkasten Geras, Austria, in 2021. I am grateful to the participants and especially to Andrea Stöckl for their insightful comments. The study was funded by the Austrian Federal Ministry of Education, Science and Culture (BMBWK).

citizenship. All couples had been married for at least four years. One woman and one man already had an adult child from a previous marriage; all the other people were childless and, except for one woman, had never been pregnant. The diagnosis of medical infertility varied between couples, but also over the course of ART treatment for the same couple. The informants who—among others—play the main role in this text are as follows (in the order of first appearance):

At the time of our study, *Mrs Marek*[2] is 29 years old, *Mr Marek* is 34. Both come from eastern Lower Austria, where they live in a newly built house near Mr Marek's parents' house. Mrs Marek commutes to Vienna for her job in an office. Mr Marek works as a driver for a transport company. They have been married for nine years and have been trying to conceive a child for seven years. Six years ago, Mrs Marek talked to her gynaecologist for the first time about her "Kinderwunsch" ("wish for a child"), as wanting to have a child is called in Austrian discourse. After the couple had undergone four unsuccessful inseminations at a private ART clinic, they switched to the IVF outpatient clinic at the university hospital in the fall of 2000, where they completed an unsuccessful IVF cycle. Due to financial reasons, the couple switched back to the private clinic, where they underwent another two unsuccessful IVF cycles. The couple then decided to take a longer break from treatment. During this time Mrs Marek surprisingly becomes pregnant without medical intervention.

Mrs Koller is 33 years old; her husband is 32. Mrs Koller grew up in Vienna, where she also lives and works as a university teacher. Mrs Koller has been married for about six years and had been trying to get pregnant for four years. As her gynaecologist's advice to have "gezielten Geschlechtsverkehr" ("targeted intercourse") did not work, the gynaecologist referred her to the IVF outpatient clinic, where she underwent three unsuccessful IVF cycles before the fourth cycle results in a pregnancy. In contrast to most other couples, Mrs Koller underwent IVF treatment "single-handedly" in that her husband only came to the clinic for those appointments where his presence was absolutely necessary (for the initial consultation and for the sperm donation before the puncture).

Mrs Salzer is 36 years old, and *Mr Salzer* is 43. They both graduated from grammar school and work as clerks at various companies in Vienna. The couple lives in a newly built house to the west of Vienna, which they planned and built with a future child in mind. They have been married for thirteen years and have wanted a child for just as long. About seven years ago, during a routine gynaecological examination, Mrs Salzer approached a gynaecologist for the first time concerning her "Kinderwunsch." As Mr Salzer was diagnosed with "severely reduced sperm quality," several doctors recommended IVF treatment. For financial and organizational reasons, the Salzers turned to the IVF outpatient clinic, where they underwent their first IVF cycle in the spring of 2000, which was unsuccessful. The couple had two more unsuc-

2 All names are pseudonyms.

cessful IVF cycles before an ultrasound examination of Mrs Salzer revealed first a polyp and then a fibroid. Because the Salzers found the treatment at the IVF outpatient clinic very unsatisfactory, they switched to a private clinic, where they underwent their fourth IVF cycle at the beginning of 2002. This also failed. Further examinations were carried out at the private clinic, which ultimately led to the conclusion that successful IVF treatment was "very unlikely." The couple then decided not to continue with IVF treatment.

IVF dramaturgy and temporal horizons

IVF users—women as well as men—often describe their engagement with IVF treatment as something of an emotional rollercoaster that indexes the drama of their stories about having a child. Here are some of the emotional states and feelings that users experience before, during and between IVF treatment cycles: strong desire to have a baby; pressing uncertainty and puzzlement about why the "natural way" of conception (through sexual intercourse) isn't working; joyful confidence when doctors praise the "promising" follicle growth during hormonal stimulation of the ovaries; nagging envy of other people's having children "so easily", given the hard work and suffering they have already gone through; indignant deservingness of having a baby oneself; feelings of not being sufficiently supported or even betrayed by the partner who supposedly does not engage in the treatment process as whole hearted enough; devastating despair and self-doubt after a failed IVF cycle; relieved joy when a pregnancy is diagnosed; deep doubts when having to decide whether to continue ART treatment or not; panic and overwhelming fear of a (another) failure; and, not least and of paramount importance, probing hope that everything will turn out fine when finally holding one's own baby in one's hands.

Usually, both in clinical discourses and media accounts as well as in academic writing, such feelings are dealt with either as a matter of coping with the demands and suffering connected to IVF treatment, or as motivation for undergoing ART treatment, or as psychological factors which may hamper or support becoming pregnant. In any case, such feelings are seen as being external to the techno-medical procedures of IVF itself (e.g., Devonport and Lane 2013; Rockliff et al. 2013). From such perspectives, IVF and feelings are understood as quasi standing *vis-à-vis* each other. However, such conceptualizations fail to recognize the generative role that emotions and feelings have for technologies such as IVF in the first place.

To address this, I draw on Schatzki's work on social practices, in particular, what he calls the "teleoaffective structure." In his view, social practices, defined as "temporally unfolding and spatially dispersed nexus of doings and sayings" (Schatzki 1996: 89), are organized by various aspects. Among others, the doings and sayings of a social practice "hang together" through its teleoaffective structure. This is "[…] a range

of normativized and hierarchically ordered ends, projects, and tasks, to varying degrees allied with normativized emotions and even moods" (Schatzki 2002: 80). These are normatively charged complexes of purposes and objectives (referring to the *telos*) and emotions, sentiments, and passions (the affective dimension) that govern which activities are regarded as "right" and/or "acceptable."

The teleoaffective structuring of IVF treatment as a social practice, I content, relies on and at the same time produces hope in important ways: hope aligns the doings and sayings of IVF treatment along its *telos*, having a hoped-for baby and becoming parents by both limiting and employing the multiple uncertainties involved in IVF treatment; hope is also nourished when one after another task necessary in IVF treatment is successfully worked off, enabling to proceed to the next.

At least two fundamental, interrelated characteristics of IVF are of central importance here: Firstly, IVF is a complex and uncertain technology that requires the concerted interplay of activities and capacities involving both technical procedures and (mostly female) bodies, yet—and depending on the individual situation—with more or less uncertain results. Both as a future possibility and as a past and current matter of fact, failure (of producing follicles, embryos, and ultimately pregnancy, to name but a few) is all too real, as IVF users painfully know after their first failed IVF cycle at the latest. When I asked Mrs Riedel (44 years-old, four unsuccessful IVF cycles) after she and her husband had stopped ART treatment, what had her impressed most during ART treatment, she replied:

> The first two attempts where the implantation [nidation] didn't work, the day when I got the menstruation, that's the thing that somehow stayed with me most. Because maybe beforehand the hope is pretty high that it [getting pregnant] could work, and then suddenly there is the bleeding. That is, that is a hammer. That was absolutely <Mrs Riedel laughs> a hammer. (Mrs Riedel)

The medico-technical IVF procedures, then, are to be understood as being necessary but not sufficient for pregnancy to occur: it also requires (female and, to a lesser extent, male) bodies to be successful. The biotechnological feasibility of IVF is giving nature a "helping hand" Strathern (1992); it can only enable pregnancy and make it more or less likely, but not directly cause it. The interplay of technology and biology remains unreliable and is often mysterious, which leads to multiple uncertainties. In our study (Hadolt and Lengauer 2003: 285ff) we identified three main types of uncertainty, which we called "uncertainty-of-occurring" ("Unsicherheit des Passierens")—Will there be enough good follicles? Will the retrieved eggs fertilize? Will implantation work? etc.—, "uncertainty-of-the-actual" ("Ungewißheit des Tatsächlichen")—What is really the reason that I cannot conceive a child? What exactly was the reason that the last IVF cycle didn't work? etc.—, and "uncertainty-of-the-best-possible" ("Ungewißheit des Bestmöglichen")—What should I do to make im-

plantation as likely as possible? Should we change the clinic for our next IVF cycle? etc. Hope tackles—and relies on—such uncertainties by maintaining the potentiality of both a positive, albeit hidden reality in the past and present, and a positive outcome in the future. As a form of "embodied meaning-making" (Wetherell 2012: 4), hope does this by embodied feeling rather than cool, detached reasoning. Hope maintains movement towards a desired future in the face of hovering failure. Hope keeps the story/narrative of IVF going.

Secondly, IVF is a cumulative technology. Lasting between four to seven weeks, and IVF cycle consists of a series of phases or steps, including: ovarian hyperstimulation to produce up to 30 eggs capable of fertilisation; the "puncture" of the follicles that have developed in the ovaries to retrieve (or "harvest" as some doctors call it) the eggs; the fertilisation of the eggs with the sperm in the laboratory and the cultivation of the resulting embryos for up to seven days after fertilisation; the embryo transfer, in which one to three of the developed embryos are transferred back into the uterus; and the biological implantation of the embryo in the uterus (nidation), the success of which can only be checked by a pregnancy test after a further two-weeks of "waiting period" at the earliest. Every individual phase must be successfully completed to at least a satisfactory degree to maintain the possibility of becoming pregnant. If one phase fails, the entire IVF cycle has failed. With a highly cumulative trajectory IVF is like a "hurdle race" ("Hürdenlauf"), or "obstacle course" (Franklin 1997), in which all hurdles must be successfully overcome to emerge victorious.

Given this hurdle race structure, IVF treatment is firmly directed toward the future. In addition, after a failed cycle, IVF users are confronted with the decision whether they should try another cycle, and then probably another one. Structured by the interplay of failure and hope, a specific procedural pathway is laid out to be followed, both within and between IVF cycles. Junctures that afford alternative routes only exist at specific points of the process (e.g., when the number and quality of follicle during ovarian hyperstimulation is low), but most importantly in between IVF cycles.

IVF treatment, in its dramaturgy of hope and failure (or success), has at least a threefold temporal configuration: First, a step-by-step configuration that highlights the next task and the next milestone at hand and follows an individual IVF cycle's cumulative trajectory. The temporal horizon for action and hope is the next step/task. Second, the overall configuration of the individual IVF course has the successful IVF cycle as its hoped-for temporal horizon. Particularly in these two temporal configurations, hope is strongly framed by the threat of future failure. One way of dealing with this is to curb hope to a "proper" extent to avoid disappointment when the IVF cycle fails. Mrs Marek said about her hopes for a positive outcome when she started her first IVF cycle:

> No, I don't want to set my hopes too high, because otherwise I might be depressed afterwards, or I don't know. I'm the kind of person who can cope with something quickly or something. But I always lower my hopes. And if it does work out, I'm happy, but I don't have high hopes for the first time. (Mrs Marek)

Another reason for not committing oneself too strongly to a particular outcome of an IVF cycle is that failure is not pre-programmed by decrying it. E.g., during the waiting period during their first IVF cycle, 54 years-old Mr Riedel stated that he did not want to "talk about the bear's fur [getting pregnant] until the bear had been killed" ("über den Fell des Bären reden, bevor er erlegt ist"), because that would bring bad luck.

In the third temporal configuration, IVF, as part of the overarching project of having a child and becoming a parent, has its temporal horizon in having a child with or without ART treatment. IVF users emphasise this perspective before an IVF cycle starts or has ended, but much less so within an IVF cycle. Only after the failure of an IVF cycle do opportunities for strategic decisions arise: whether to attempt another IVF, when, in which clinic, under what circumstances, etc. Decisions must also be made during an IVF cycle, but these are largely left to the medical professionals or are based on the requirements of the next IVF step to be accomplished. Our informants experienced their decision-making options as very limited and tended to react to the medical instructions rather than actively acting; they practically never acted against the doctors' advice. In contrast, strategic planning became salient after the end of an IVF cycle, though even then people only cautiously considered plans beyond the next IVF cycle. Their considerations in this regard were not characterised by an if-then, but rather by a casual exploration of possible courses of action; "let's see" ("mal schauen"), as 38 years-old Mr Pichler often put it, when he talked about the future.

IVF users, therefore, tend to plan their quest for a child retrospectively about past events rather than prospectively. Such planning is used to lend a certain coherence to the quest of having a child and to evaluate past actions and events and give them meaning. So, while for IVF users planning that is focussed on the individual IVF cycle is prospectively limited by the possibility of failure, the experience of failure in their planning attitude in a broader sense is a kind of reflective pause to clarify the next steps and an essential element in the ways of how couples structure their stories of having a child and starting a family.

Embryo transfer and waiting for pregnancy

On the biotechnical-assisted path to pregnancy, the embryo transfer, and the hoped-for implantation of the embryo in the uterus, also known as nidation, play a crucial

role. Embryo transfer and implantation differ from the previous stages in several respects. Apart from the fact that implantation is the "decisive phase" in which it becomes clear "will it be something or will it be nothing," as Mrs Salzer put it, the result of the implantation phase not just concludes a stage, but the IVF cycle altogether. At the medico-technological level, the embryo transfer is the last medical act; from this point onwards, the conception process is considered as in any "normal" pregnancy, and implantation itself must be left to the "natural" processes of the female body; nothing more can be done to make pregnancy more likely. In addition, while the work and result in the stages of hormone stimulation, puncture, fertilization and, in the narrower sense, embryo transfer are characterized by their temporal proximity to each other, the result of the implantation phase, and by extension, the whole IVF cycle, only becomes apparent after a waiting period, which is about two weeks. Not least because of the high stakes, our informants experienced this waiting period, painfully characterized by inactivity and uncertainty, as particularly stressful and difficult to bear. E.g., Mrs Pichler, 32 years old, commented on the difficulties during this waiting period after her second unsuccessful IVF cycle:

> On the one hand, I'm happy, on the other hand I'm afraid. […] of the result, of the urine test [pregnancy test]. Of that, yes. Otherwise, I don't mind. It's not so bad. But the fourteen days [of the waiting period], that's a disaster. (Mrs Pichler)

One might expect that implantation and, in consequence, pregnancy is a matter of either-or, either pregnant or not pregnant. This is indeed the case, but the temporal point of view from which implantation is evaluated is crucial here. Only from an *a posteriori* perspective, when a definite and unambiguous outcome of an IVF cycle is established, does the outcome take on the binary form of either-pregnant-or-not-pregnant. From an *a priori* position, however, before a definite outcome is reached, things often are not so clear; the bodily state of gestation is uncertain, and pregnancy is hopeful. This can lead to a situation in which pregnancy becomes gradable, a matter of more-or-less, and in which IFV users might feel "a little bit pregnant".

All our informants agree that a "real" pregnancy only exists when an embryo has been successfully implanted. However, since this event cannot be known when it takes place biologically, but only afterwards, by means of the pregnancy test, it is both uncertain if "it will happen" (a matter of "uncertainty-of-occurring") and if it perhaps has already happened (a matter of "uncertainty-of-the-actual"). Such uncertainty—which comes into being only through the knowledge about embryo transfer and implantation—opens a space of possibilities for understanding and experiencing pregnancy in novel ways. The embryo transfer is a central facilitator in this: having the embryo in the uterus after the embryo transfer—and being aware of it—creates an as-if pregnancy situation, because our everyday understanding of pregnancy is constituted by the idea of "baby in the womb." The fact that "having

put the embryo into the uterus" is not the same as implantation becomes sublimated via qualitative induction (a method of inference in which one property of a phenomenon is used to infer the phenomenon as a whole): "having the embryo in the uterus" becomes quasi equated "baby in the womb", even though the process leading to a pregnancy is not yet completed.

But not completely so: In particular, during the waiting phase after the embryo transfer, our informants' attitude oscillated between knowing what it takes for a "real" pregnancy and hopeful feelings concerning the potential for pregnancy in the first two weeks after the embryo transfer, being cautious and hopeful at the same time. Many of them resolve the tension by feeling "a little bit pregnant", such as Mr Lang, who told us that his wife had a "feeling of being a little bit pregnant" when she waited for the pregnancy test after her second embryo transfer. Similarly, Mrs Koller, who repeatedly emphasised in our conversations how much she had learned about reproduction from a medical perspective since she started IVF, reflects on the time after the embryo transfer in her first IFV cycle, which was unsuccessful:

> Somehow you think, well, I mean that, somehow you think you're pregnant—a little bit. I don't mean that you feel it […] as in stories about pregnancies, first when you feel sick. I mean, you don't really feel the pregnancy, […] that you have a big belly, that you really experience—uh—[…] a physical experience of pregnancy, that's much later. But the thought, yes, this emotional feeling. […] I mean, you kind of build up a little bit, that you say, […] it's not certain yet. (Mrs Koller)

Mrs Marek also reported that she felt "somehow pregnant" during the time between embryo transfer and the onset of menstruation when she underwent her first (unsuccessful) IVF cycle. She said about her behaviour during this time:

> Well, when that [the embryo transfer] is over, you just walk like on raw eggs. <Mrs Marek laughs> You think: just don't move quickly! Yes, and then the waiting begins. That, the 14 days, that was somehow. Because you actually think about it every day. I think, one also feels somehow pregnant subconsciously, because you're totally careful and I hardly smoked anything. So that's already. Somehow, I mean, secretly you maybe DO hope that you're pregnant, but. Yes, it's just, after a day: do you feel anything yet? No, you don't feel anything. Yes, and then on the 15th day you take the [pregnancy] test. But I already knew one or two days before [that she was not pregnant], because that's when I started having cramps and light bleeding. (Mrs. Marek)

Mrs Salzer expressed the difference between feeling and knowing even more pointedly than Mrs Koller, quoted above, and said of herself that she had already had the feeling of being pregnant immediately after the embryo transfer, although she did not know this definitively:

> I mean, I already know that I'm NOT at that point, so [...] I mean, I already know that it's NOT necessarily [the case that she is pregnant], but from the FEELING? YES. From that moment on, I have the feeling [of being pregnant]. (Mrs Salzer)

Like most other IVF users in our study, Mrs Salzer was careful not to hope too much that she would actually be pregnant to avoid disappointment and despair if treatment proved to be a failure.

Making pregnancy real

Remarkably, the possibility of being "a little bit pregnant" also exists from a medical point of view. Even after the two-week waiting period following embryo transfer has passed, it is not always possible to say with certainty "if it has worked out" ("ob es etwas geworden ist") or not, to use Mrs Salzer's expression. The onset of menstruation or a positive or negative pregnancy test is not necessarily the criterion by which such a clear result can be determined. If the pregnancy test is positive and no menstruation has occurred, doctors and the women concerned assume that there is a pregnancy. Such a "biochemical pregnancy" is then clinically confirmed a few weeks later by an ultrasound examination, making a pregnancy even more "real".

The situation is different, however, when no menstrual bleeding has occurred, but at the same time no clearly positive pregnancy can be determined due to ambiguous hCG levels on the pregnancy test.[3] Such a biochemical condition is sometimes referred to by some doctors in our study as "a little bit pregnant". In the case of the Mrs and Mr Lang, where this occurred during their first IVF cycle, blood was taken from Mrs Lang to determine the corresponding hormone status more precisely that by checking the hormone status in the urine. The couple was told in the clinic that the result should be available the same day in the afternoon. For Mrs and Mr Lang, 33 and 34 years old respectively, this increased their hope for pregnancy, but also prolonged the period of uncertainty. Their anger was correspondingly great when they only found out the result of the blood test the next day after several telephone calls. Mr Lang reported the negative result to us in an e-mail:

> Unfortunately, we were unable to find out yesterday whether we were allowed to celebrate or not. At 3 o'clock in the afternoon there was still no result. Today we tried again—8:40 a.m., still nothing, another hour's wait. We are not angry, but here too the procedure is incomprehensible: Ultrasound appointment,—no, but urine test,—but ultrasound—no, wait for urine test, – not clear, – so, blood test – result in the afternoon,—no, but not,—so tomorrow morning,—no, but not so

3 The pregnancy test works by measuring the amount of human chorionic gonadotropin (hCG), a hormone that only develops during pregnancy.

> early. Now, just after 10 a.m., finally the certainty. The waiting and hoping has come to an end. But unfortunately, the bad news. Not pregnant. That has to be digested in the first place. There were no tears, we are not upset. It's still too early. It wasn't meant to be yet [to become pregnant in the course of the first IVF cycle]. (Mr Lang)

Even if the pregnancy test is clearly negative, it can remain uncertain whether a pregnancy is present or not if there is no menstrual bleeding. This was the case for Mr and Mrs Pichler during their second IVF cycle and Mrs and Mr Salzer, also during their second IVF cycle. The following vignette describes the medical appointment to which I accompanied Mrs and Mr Salzer and at which the negative result of the pregnancy test, for which Mrs Salzer had previously given urine, was discussed:

> Dr Kramer greets us at the door of the consultation room and asks Mrs Salzer, who was the first to enter: "Are you bleeding?" Mrs Salzer denies this, shaking her head. Dr Kramer turns to Mr Salzer, who had entered immediately afterwards, and jokingly asks him too: "Are you bleeding?" Mr Salzer also, jokingly mocking his wife, says no. We all head to our seats as usual and before Mrs Salzer had even sat down, Dr Kramer announces that the pregnancy test unfortunately is negative: well, this would be just difficult now; if Mrs Salzer had already had her menstruation, it would be straightforward: pregnancy test negative plus menstruation; but it wasn't clear that way; it could just be the case that her menstruation would come later; but it could also mean that implantation had been delayed somewhat and that the hormone levels had therefore not yet built up.
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> Mrs and Mr Salzer listen quietly with disappointed and annoyed facial expressions. Dr Kramer continues that unfortunately she could now only offer to do another blood test; but she would probably only have the results on Monday, because unfortunately it was already very late for today; in order to get the results today, the couple would have had to come in the morning.
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> Mrs Salzer turns to her husband and says reproachfully: "I'll kill you!" [At Mr Salzer's suggestion, they had come to the clinic at 11 a.m., as Mr Salzer wanted to go to work for a few hours beforehand]. Mr Salzer defends himself, says it was not his fault. Mrs Salzer replies that it was certainly his fault, he had only wanted to come at 11 and now it was too late for the results of the blood test.
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> Dr Kramer seem uncertain about what to do, first saying that it wasn't Mr Salzer's fault and then immediately agreeing with Mrs Salzer that it was too late and they should have come earlier.
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> They then go on and on about whether Mrs Salzer could be pregnant or not and Dr Kramer keeps repeating that she was sorry that she cannot say anything today; everything is very complicated in early pregnancy and normally these steps that we observe go unnoticed.

At one occasion Dr Kramer asks Mrs Salzer if she feels pregnant. Mrs Salzer replies by asking how one feels being pregnant. Dr Kramer smiles and says that she could only tell from what others had told her, but if she simply feels different? Mrs Salzer: no, it is just like before the menstruation. Dr Kramer finally takes a blood sample from Mrs Salzer, whereupon a discussion ensues as to whether it might not still be possible to get a result today, which Dr Kramer again denies.
Dr Kramer leafs through the medical record again and says ponderingly that only three embryos had developed; but these would have been quite nice (she repeats this several times); but she had had a lot of eggs, a "huge pile of eggs" ("riesiger Eierhaufen"), but only three would have been fertilised. Mr Salzer admits: "Yes, that is also my poor [sperm] quality". Again, Dr Kramer says that if Mrs Salzer had got her menstrual bleeding, then one would know, but like this (?); there would just be pregnant or not pregnant. Dr Kramer then adds that there was also "a little bit pregnant", so the hormone levels had to be observed; but the pregnancy test was clearly negative. […]
Finally, the meeting comes to an end and after arranging another appointment for the next week we say goodbye.
All the way to the exit, Mr Salzer talks to his wife and tries to convince her that they still had a chance for being pregnant. He calls Mrs Salzer (not very convincingly) a "slow breeder" ("langsame Brüterin") and that it could be the case that everything would just take longer. Mrs Salzer keeps repeating that she did not believe it, starting to cry. We stop and Mr Salzer hugs her for a few minutes, striking her head. Eventually we continue walking towards the exit.
Arriving in front of the hospital, Mr Salzer lights a cigarette—not two cigarettes, as he had done last time; Mrs Salzer had given up smoking in the meantime. Mrs Salzer says challengingly that she could now smoke again. Mr Salzer replies: no, she couldn't; it could still be that she was pregnant. And he finishes the cigarette on his own.
The following day Mrs Salzer calls me on the phone to tell me that her menstruation started, which unquestionably showed that this IVF cycle was again unsuccessful.

Apart from the social dynamics between Mr and Mrs Salzer and Dr Kramer respectively and the dramatic quality that medical appointments can have, especially at the very end of an IVF cycle when its ultimate result is not yet clear, this vignette also shows how hope and uncertainty are intertwined in the teleoaffectivities of IVF. Uncertainty, spanning what is actually the case now ("a little bit pregnant?") and how this will develop in the near future ("an established pregnancy?"), opens space for hope. Against the background of inconclusive test results, bodily states of feeling and organisational procedures, such hope is negotiated between the involved actors in terms of past events in the hurdle-race IVF, uncertain medical knowledge about reproduction, results of a urine test, ascribed personal qualifications and shared (or not shared) cigarettes. At times, hope is probing, taking on hopeful diagnostic possi-

bilities again and again, then desperate or dwindling until it crumbles away and ends abruptly with the onset of menstruation—at least as far as this particular IVF cycle with its specific time horizon is concerned. After a break, Mrs and Mr Salzer will build up hope and try again and only stop ART treatment completely after a fourth unsuccessful IVF cycle.

If we look at it as a process, pregnancy may also be gradable rather than binary from a medical point of view. In any case, it needs to be made ever more "real", both physically and in terms of women's feelings, beginning with hormone stimulation and culminating in the pregnancy test. But even if a pregnancy is no longer questionable from a medical perspective because it has been "definitely" established through pregnancy tests and ultrasound scans, the making-real of pregnancy can continue. This takes two forms. The first concerns the feeling of being pregnant. Mrs Koller said in an interview one week after her pregnancy had been confirmed by the positive pregnancy test that she cognitively knew that she was pregnant, but that the corresponding bodily feeling had not yet set in:

> On the other hand, of course it was really nice when I heard [during the pregnancy test] that it was OK. And somehow it's also in my head: I mean, it's OK now and I'm now pregnant. But somehow, in terms of feeling it still needs time. […] At the beginning [of a pregnancy] it's still most uncertain [that a pregnancy will last], or I mean, the danger of something happening is the greatest. (Frau Koller)

Although Mrs Koller already felt "a little bit pregnant" during the phase of implantation, her feeling after the positive pregnancy test was too little to "really" feel pregnant. What she missed in this context, as she explained elsewhere, were such typical signs of pregnancy as morning sickness and especially the baby's movements. As a contribution to making the pregnancy real, she also gave an important place to the ultrasound examination, which was scheduled for the week after the interview and which was intended to confirm the pregnancy clinically, because she hoped that this would make the pregnancy more visible. She said about the pregnancy test: "I mean, what's the big deal? I mean, something just changes colour."

In the above quote, Mrs Koller also refers to the second form of making the pregnancy real: the risk that "something will happen." Certainly, the positive pregnancy test is the first objective, albeit not always clear, sign of pregnancy and once this hurdle has been overcome, women no longer doubt that they *are* pregnant. What they do worry about is whether they will *stay* pregnant. Especially in the first twelve weeks of pregnancy, the threat of a miscarriage is experienced as a real possibility. Such a threat was perceived as even more serious if women and couples had already experienced a miscarriage, as was the case with the Durand couple.

To some extent, such a risk is certainly also perceived in the case of non-medically assisted pregnancies, although here, too, the first twelve weeks of pregnancy

may be considered the "dangerous" ones even in this case. This is supported, for example, by the fact that the gynaecologist who cared for Mrs and Mr Durand during their pregnancy did not give Mrs Durand the *Mother and Baby Book* (*Mutter-Kind-Pass*)[4] until after the twelfth week of pregnancy. He explained several times that he would always do so in order to reduce disappointment in case of a miscarriage. However, IVF users seem to experience the risk of pregnancy as much more pronounced than with "normal" pregnancies due to the high stakes involved in ART treatment and the difficulties of getting pregnant in the first place. In addition, the way in which the early stage of pregnancy becomes "visible" in the context of IVF may also play a significant role.

Precarious knowledge

In IVF treatment, precarious knowledge is everywhere—and so is certain knowledge in the very moment. To a certain extent, knowledge produces uncertainty, as this points to the parts that still are not yet known. In contrast to medically unassisted reproduction, where conception only comes conscious "after the fact" at a comparatively late state, medically assisted conception is characterized by its very early, conscious, and detailed perception. This also applies to the aspects that can "go wrong". As far as her theoretical knowledge of human reproduction was concerned, Mrs Koller emphasized that it was precisely the knowledge of the possible difficulties that was new to her:

> So to speak, how it works theoretically, uh—the fertilization and a pregnancy and so on, the development from the fertilized egg, that was COMPLETELY CLEAR to me. I mean, with all the stages, the biology of it. But what was, uh, very NEW for me was rather these things, that how REALLY possible it actually is that fertilization occurs. And that, first of all, it's not all that likely. And that if fertilization does occur, that even with NORMAL [pregnancies], as is often the case with one fertilized egg, but it aborts and you don't even NOTICE it and you just have your menstruation. […] Somehow, I don't know, biologically speaking, OKAY: sperm cell, egg cell: kabong! <Mrs Koller and the interviewer laugh> It implants! But I mean, what kind of complications can there be UNTIL it implants! […] So then, it's kind of like in the textbook: it works! But I know all the steps, where things may not work. This is what you do not know and this is what you realize then [when undergoing ART treatment]. (Mrs Koller)

4 In Austria, the *Mother and Baby Book* (*Mutter-Kind-Pass*) is a free of charge health prevention program for pregnant women and young children up to the age of five.

Mrs Koller's conviction that new knowledge is gained by going beyond textbook knowledge and by focussing on the potentially flawed parts of reproduction is striking. She focuses on what can "go wrong", which in turn is enabled by the fragmentation of the procreation process by undergoing the "hurdle race" of IVF with its various stages and cumulative outcomes. The complexity of the process turns much of the knowledge that she had known as unproblematic before her engagement with ART, precarious knowledge, knowledge until further notice. As a result, ART treatment also has the potential to make "natural" conception visible in a new way as an equally potentially ineffective endeavour. The need to make a pregnancy "real" after IVF treatment and the heightened awareness of how much can "go wrong" may extend to the post-IVF phases of pregnancy and further add stress to IVF users. In this sense, pregnancy after IVF may be by no means "completely normal", contrary to what medical professionals and the women and men concerned may believe.

Concluding remarks

In this chapter, I have explored the entanglements of temporality, uncertainty, and hope as they become evident in the case of IVF treatment. I have argued that hope, in its relational and intentional mode, is intrinsic to IVF as social practice: as part of the teleoaffective structure of IVF treatment, hope holds together and organizes the doings and sayings of IVF, and by extension the human and non-human participants involved (Schatzki 1996; 2002). Against the backdrop of an often inconclusive past and present and potential failure in the future, hope both relies on and tackles uncertainty and—depending on where IVF users are in the process of IVF treatment and which temporal horizon is salient—maintains concerted movement towards a desired future; hope keeps the story/narrative of IVF going.

I followed IVF users in their dramatic quest for having a baby and becoming parents as they experience and deal with the necessities, predicaments and imponderability of IVF treatment. Focusing on the final phases of IVF treatment, I have shown their pragmatic stance by which they, being specifically situated, work through what needs to be done in the various stages of IVF treatment, make the best possible use of their resources at hand, imagine future possibilities, and try out new (and old) things to achieve pregnancy. In such a pragmatics of uncertainty (Whyte 1997), hope for a partially hidden favourable situation in the past and present and for positive outcomes in the future is carefully modulated, as their story unfolds: In order to make hope "bearing" ("tragfähig", in the words of Kinsky 2023: 34), IVF as social practice is organized in ways so that IVF users (and the doctors treating them) curb their hope to prevent too much disappointment, should an IVF cycle turn out to be unsuccessful, but nourish hope to the extent that necessary IVF work can continue and suffering be endured. In such a "paradox of hope" (Mattingly 2010), hope has intentional-

ity; it is *hope for something*, thus bringing its referents (e.g., many eggs, embryos, and ultimately successful pregnancy and a baby) into play, charging them with embodied meaning and affective purpose, while simultaneously foregrounding potential failure.

Hope dwells in uncertainty about *what is*, *what will happen*, and *how best to deal with*. Knowledge brought into play as a means of dealing with uncertainty can also foster uncertainty, as detailed general medical knowledge about human reproduction makes visible the many aspects of conception that can go wrong, and tentative knowledge about the individual IVF cycle opens the space that makes gradable pregnancy in the form of "being a little bit pregnant" possible, both in the experience of IVF users and in biomedical discourse, and necessitates work to be done to make pregnancy "real."

I want to conclude by drawing attention to three implications that might prove useful for further research on uncertainty and hope beyond the case of IVF. The first concerns the central role that affects/emotions can play in social practices such as IVF. When taken seriously as relationally distributed among the (human and nonhuman) participants of social practices and not merely as momentary private states of feelings, hope can be probed for its function as an intrinsic constituent of social practices, furthering our comprehension of figurations that give rise to phenomena such as "being a little bit pregnant."

The second implication concerns the many forms and shades in which hope manifests itself in the stories of our informants, indicating complex feelings and functions: burgeoning hope, desperate hope, confident hope, reckless hope, comforting hope, etc. Academic literature lacks a sophisticated language of hope that could analytically capture this diversity. We could better grasp the significance of hope as a generative force in social practices by paying more analytical attention to such differences. Examining these across various socio-cultural settings might show that there are many more culturally marked idioms of hope than we can imagine.

Finally, the third implication relates to hope and uncertainty as they are temporally framed. Contrary to the taken for granted assumption that hope and uncertainty are always directed towards the future, our empirical material shows a much more complex situation, in which hope and uncertainty wander to the past and present and span to future events. By looking more closely at this temporality, we could gain a better understanding of how temporal figurations with their distinct temporal horizons are constituted and operate as social practices unfold.

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