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GAMES OF LIFE

Czech Reproductive Biomedicine. Sociological Perspectives

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CONTENT

CHAPTER ONE
Introduction to Games of Life

Iva Šmídová, Eva Šlesingerová, Lenka Slepičková

Reproductive medicine is an attractive field for sociological inquiry for several reasons. Seemingly "natural" processes tackled by it, such as sexuality, conception or childbirth, are targets of biopower in every society as an attempt to tame life to fit within the borders outlined by these societies (Foucault 1999). They are a subject for fight over their definition, knowing and naming, delimiting normality, desirability and merit. Reproductive medicine is approached here as a representative of the three typical areas where current biopower/biopolitics is manifest, as identified in 2006 by Paul Rabinow and Nikolas Rose in their text *Biopower Today*, the others being genomics and the reconstituted idea of race (Rabinow and Rose 2006).

The area of biological reproduction in particular, and the biomedical approach to it, has become the site of turbulent changes since the beginning of the 21st century. The transformations have heralded an "epic" change in the everyday lives of people in the richer parts of the world, with new reproductive technologies opening up the vision of the normal existence of designer babies and engineered people (Rose 2006). New identities and forms of socialities emerge, such as biological citizenship or biosocialities. Biological phenomena and life itself are starting to be referred to as objects with endless ways of making technological transformations (Rose 2006). A debate is taking place on the background of such changes: whether these new trends offer more hope or threat; who should regulate them; and how, under what conditions, and to whom should they be made available to.

As part of our research, we have targeted reproductive medicine as it is practiced and conceptualised in the Czech context.[1] It is burdened by the post-socialist legacy and at the same time it is exposed to the requirements of the latest technology, while being in accord with ethical principles or the interests of patients. Therefore, it provides the ideal terrain for a sociological perspective, the primary goal of which is to unmask what is behind the evident and expose the meaning, value and power structures hidden in everyday practice and routine. We have decided to concentrate our research on the mechanisms of reproduction in the hegemonic position

[1] The title of the research project funded in 2011–2014 by the Czech Science foundation (GAČR) was *Childbirth, assisted reproduction, and embryo manipulation. A sociological analysis of current reproductive medicine in the Czech Republic* (P404/11/0621).

of biomedicine, focusing on the area of human reproduction in the specific environment of the Czech Republic. Three specific subfields of Czech reproductive medicine will be covered: childbirth, assisted reproduction, and embryo manipulation.

The focus of this book, as one of the publication outputs of the research team's work, is to describe and explore how to sociologically grasp the social field of reproductive medicine, its challenges, problems, social consequences and also its specific cultural context. Stating this ambitious claim within the three identified subfields of Czech reproductive medicine, we are looking for answers to the set of research questions outlined below. The three specific subfields were approached by the three individual members of the research team in semi-independent research studies. This can be seen in the authorship of three chapters of this book: Eva Šlesingerová has covered the subfield of manipulating embryos and DNA; Lenka Slepičková has explored assisted reproduction; and Iva Šmídová has examined the practices of childbirth in the subfield of Czech obstetrics. The latter two authors have also contributed one joint chapter. Despite the relative autonomy, these subfields are united by a shared methodological as well as conceptual framework. Therefore, the concluding section of the book interlinks them in a joint approach to answering the set of analytical questions posed at the beginning of our fieldwork:

- How are the borders between normality/legitimacy in the definitions of health and illness negotiated within the three specialized fields of reproductive medicine: 1) childbirth, 2) assisted reproduction, and 3) the issue of manipulating embryos/DNA/stem cells?
- In what way is trust established within the system of modern reproductive medicine?
- How does the status of biomedicine become the norm, and how is normality established through biomedicine?
- By what paths are the categories of status, gender, and ethnicity introduced into this process?

The content of the book in your hands reflects the gradual process of advancing and rejoining the original concept in the fieldwork data in answering the questions posed. Firstly, two chapters offer a conceptual framework for researching Czech reproductive medicine, inspired by recent sociological debates beyond national borders. Chapter Two, "Biopower and Reproductive Biomedicine[2] in the Czech Republic. A Sociological

[2] In this book, we decided to use the term (reproductive) medicine/biomedicine interchangeably. The common sense understanding of the term medicine overlaps in our

Perspective", offers the concepts of biopower, biopolitics, medicalisation, governmentality and authoritative knowledge as useful tools for analysing contemporary reproductive medicine. It proposes these analytical frames for understanding the ways in which the power and hegemony of modern Western medicine (biomedicine) are applied and negotiated in the field of human reproduction, and it proposes possible uses for such frames in the sociological study of Czech reproductive medicine. The chapter views biomedicine as a sign of the normalisation of modern society, identified with the Western concept of health and illness and the idea of technological progress, and subjects it to critical sociological analysis. In the context of biopower, the analysis of the normative nature of reproductive medicine and its consequences in the wider social space has some very significant implications. It affects intimacy and sexuality, the institute of kinship, heteronormative reproduction, gender identities, and more. The authors' interest in this subject is motivated by the strong connections between reproductive medicine, technology, and the commodification of health and illness. This chapter is designed to link the theme of biopower and reproductive medicine analytically and in a way that is fruitful to analysing this phenomena in the Czech context.

They further develop this idea in Chapter Three: "Biopower, life itself and reproductive biotechnologies. The Concept of Life and the Genomization of Society", where Eva Šlesingerová elaborates in more detail on the concept life itself, biopower and the recent processes and impacts that biotechnologies have on our understanding of the living and on the borders between life and nonlife. Such development poses new questions, ethical dilemmas and stimulates topical debates which, in the Czech context, have yet not been raised.

The conceptual reflections offered in Chapters Two and Three then serve as a framework for the fieldwork data and analytical inspirations utilised in the following chapters. Chapters Four, Six and Seven analyse explicitly the selected subfields identified as the core focus of the book, and the inserted Chapter Five introduces some crosscutting issues relevant for the analysis presented afterwards.

Chapter Four: "Embryo and Stem Cells Manipulation – the Czech Context. Bio-objects and their Borderlines" focuses its analytical attention

cultural context with the term biomedicine referring to the professional western medicine based on the scientific disciplines such as biology, chemistry and physics (Gaines, Davis-Floyd 2004). In some chapters we prefer the term biomedicine to stress the existence of two different approaches to health care: the preventive and curative (biomedicine). We discuss the topic in more detail in Chapter Two.

on the handling, discussion and negotiation of the status of the embryo, the issue of stem cell, and DNA, in particular. Its author, Eva Šlesingerová, focuses specifically on the scientific knowledge about the idea of life in her research. Embryos, stem cells and foetuses are explored as specific bio-objects on three analytical levels: a) as boundary objects, b) as the objects of governance and c) as a part of broader social and cultural changes. As such the bio-objects were analysed as an iconic representation of contemporary forms of biopolitics/biopower. Taking advantage of contemporary forms of biopower/biopolitics and bio-objectivisation in critical analyses, the research shows that the way embryos or stem cells are dealt with follows the modernistic idea of the enhancement and progress of the human population even on a molecular level. Within the framework of a bio-society (Rabinow 1996), new biopolitics (Gottweis 2005) and bio-objectivisation (Vermeulen, Tamminen, Webster 2013) the embryo has become a borderline object, a part of various differing worlds at the same time. On the one hand, it is the subject of arguments over moral or ethical, political values and their establishment as norms. On the other hand, it is the subject of a scientific description of the world and humanity's place in it, of its economization or commercialization etc. (Williams, Wainwright, Ehrich, Michael 2008, Mulkay 1997). The analysis of this subfield confirms the need for more extensive public debate concerning topics of profound social and cultural changes, new eugenics, the biotechnologisation of society or new kinship arrangements.

"Medicine as Reproduced Powerlessness: Everyday Life in Czech Reproductive Medicine from the Physicians' Point of View", as Chapter Five by Iva Šmídová and Lenka Slepičková, aims to provide deeper insight into Czech reproductive medicine in two important contexts: the post-socialist transformation of the health care system and the more general changes in the status of the medical profession. The chapter thematises the situation of the key representatives of the biomedical practice – the physicians. Moreover, the analysis focuses on two subfields of reproductive medicine, assisted reproduction and childbirth, as representations of how everyday lives interconnect with medicalised practices. It illustrates the pervasive blurring of their presence in our thinking on the family, normality, gender, the body, their salience in both popular and media accounts of medicine and their tendency to be commodified and commercialised. The analysis outlined in this chapter is based on interviews with medical professionals working in the specialisations studied. It reveals how the individually-perceived personal exhaustion of medical professionals is interconnected with external conditions on the level of organizing everyday hospital work and on the broader level of the expectations from the medical profession

as such. Professionals' accounts of their everyday experience show how the hegemonic position of the expert knowledge of biomedicine is maintained within the hierarchical and rigid settings of the provision of health care and how it influences the work of medical professionals and their relations with patients. Thus, the issues of power and powerlessness are offered for reflection there, along with formal hegemony and its practical implications for normalisation and the specific forms of biopolitics, medicalisation and governmentality.

Lenka Slepičková thematises "Establishing Trust as the Patients' Responsibility" and "The Role of Trust between Patients and Physicians in the Area of Assisted Reproduction" in Chapter Six. Trust as the ability to rely on doctors and believe that their behaviour is guided by the interest of the patient (Pearson and Raeke 2000) is one of the key elements of the relationship between the doctor and the patient which has persisted into the period of late modern medicine. The chapter explores trust in the way it is rhetorically dealt with by doctors working with patients in the treatment of infertility. It challenges the perspective of the existing research on trust between the doctor and the patient so far focusing mainly on the patient's perspective or the use of quantitative data. It appears that trust is seen as necessary for the success of the treatment and the trustful submission to doctors as a necessary part of the responsible patient role. Not to trust the doctors means not only to question their authority but also to oppose the unpredictability of natural laws governing both the patient and the doctor. The author also thematises the gender dimension in establishing trust in infertility treatment and its normalising as well as disciplining effects.

In Chapter Seven, "Medical Childbirth Made in the Czech Republic. Required and Desired Practices", Iva Šmídová builds upon the themes implied in Chapter Five, such as the normalisation, power relations and hegemony of the medical authoritative knowledge. It explores the question how the border between heath and illness, normality and pathology (risk, danger) is established and enforced. Based on interviews and other recorded speeches of hospital obstetricians and contextualised by references to dominant themes in the public discourse debates, the chapter analyses the use of homebirths as a phenomenon channelling and polarizing the discussions on the transformation of practices of Czech hospital birth. It thematises the spectrum of attitudes of Czech medical professionals towards the current practices, including refusal, distancing as well as involvement in its critical assessment. The chapter elaborates on the structural contexts of standpoints advocating for the status quo as a desired and not only required

practice, while also mentioning the fertile areas that provoke alternative approaches.

The thematic chapters outlined above serve to help the author team to find connections and interlink the constituent findings into a broader and more general conclusion to the theme under study. This task proved to be not only very ambitious, time consuming and overly complex to be encompassed by three research individualities, but it was also a very stimulating, rich and thought-provoking process. The final, eighth chapter "Conclusions" offers our final summary of the analytical problem under study, reviewing the findings of the research and opening the research conclusions for a broader reflection.

There are some acknowledgements to be made with regard to the contents of this book. Some opening chapters, or their segments, included in this book have been published previously in Czech (and Polish). Chapter Two: "Biopower and Reproductive Biomedicine in the Czech Republic. A Sociological Perspective" appeared in the journal Czech Sociological Review (Slepičková, Šlesingerová and Šmídová 2012) in 2012, and here it is published in its revised, modified and translated version with the permission of the journal publisher. Chapter Three: "Biopower, life itself and reproductive biotechnologies. The Concept of Life and the Genomization of Society" partly draws on an earlier text by Eva Šlesingerová, the chapter "Biopower/Biopolitics" in her Czech book The Gene Imagination – A Sociological Perspective (Imaginace genů – sociologická perspektiva) published by the SLON publishing house (Šlesingerová 2014), which has served as a theoretical inspiration for the research conceptualisations employed in this book and its fieldwork. Finally, Chapter Five: "Medicine as Reproduced Helplessness: Everyday Life in Czech Reproductive Medicine from the Physician's Point of View" was originally published in Polish as a chapter in *Ethnography of Biomedicine* (Etnografie Biomedycyny) edited by Magdalena Radkowska-Walkowicz and Hubert Wierciński (Šmídová a Slepičková 2014), and is published here in a revised, modified version with the permission of the publisher, the Warsaw University Press.

The work on this book has been an enjoyable, challenging as well as a learning process. The aim of the research was to be exploratory both in its empirical and conceptual dimensions and we, as authors, are glad that we could contribute to Czech medical sociology or the sociology of health, illness and the body only recently treated in the Czech context. During the work on the project which cumulated in this book, we have participated in several thematic initiatives and debates that have inspired us in the

work-in-progress analyses. Such inspirations come, in particular, from the interviewees themselves, physicians and scientists, and from social science colleagues involved in thematic debates and in institutionalising this specific subfield of research in the national as well as international contexts. We are thankful for these insights and the mutual sharing of good research practices.

The authors would like to thank the reviewers of the manuscript, Amy Speier, U.S.-based medical anthropologist, and Radka Dudová, Czech sociologist, for their valuable and detailed feedback. Improvements in the final version of the book were made thanks to their observant eyes and sharp expertise. Remaining shortcomings and imperfections are solely the authors' responsibility. We would also like to thank Sylva Ficová and Barbora Hammondová for translating some of the chapters and Steve Chalk and Michael Beauchampfor their careful language and copy-editing in the final phase.

The research findings covered by Games of Life will find their very practical implementation. These include an impact on the relevant policies and reorganization of Czech health care in reproductive medicine through the involvement of the authors in several governmental advisory bodies, thus strengthening the social impact of the relevant research findings. Moreover, some practical implications of this research will also be utilised in teaching academic courses to generations of social scientists to come. Therefore, the sociological perspectives on Czech Reproductive medicine now recorded in this book will, hopefully, provoke other reflections on games of life performed by recent biomedical advancements in human reproduction.

CHAPTER TWO

Biopower and Reproductive Biomedicine in the Czech Republic. A Sociological Perspective

Lenka Slepičková, Eva Šlesingerová, Iva Šmídová

Biological reproduction concerns every one of us – we were all conceived, carried in the womb and we were born; most of us have children of our own. Reproduction is a sensitive and fundamental theme in the life of every person, it is the subject of heated discussions, both medical, academic, and within the general public. Population studies, social politics, and demography have repeatedly given much attention to the issue of biological reproduction in the Czech population.[3] The results of these studies later become the topic of various reports in the media. These include the alarming news that as a result of the lower birth rate there will be no money for retirement benefits, or moralizing statements about the general decline of human culture connected with the dying-out of European civilization, or texts about the changes in life-style in the era of late modernity, and criticism of narrowing reproduction to its biological aspect. Specialized analyses of the reproductive behaviour of the Czech population is often commissioned by the state administration (for example Rychtaříková, Kuchařová 2008; Kuchařová et al. 1999), and biological reproduction is an ever-present theme as part of the popular and popularizing discourse.

Sociology, too, has at its disposal an extensive theoretical apparatus enabling the study of the biological aspect of reproduction, which, aside from social reproduction as the ultimate area for this type of study, is part of the network of social meaning, institutions, values, or power struggles. Sociological research cannot ignore the fundamental institution of biological reproduction, namely reproductive biomedicine. In the field of human reproduction, it is reproductive medicine that is almost never questioned for its expert authority. Rare efforts, well-covered by the media, to break away from its authority are accompanied by various sanctions: clashes with those around, with doctors, with the law. It is one of the fields of medicine that is highly prestigious, costly, uses the latest technologies, and at the same time has a license to perform "miracles".[4]

[3] For inspiring texts on the topic see Křížová (2006), Hrešanová (2008), Rabušic (2001), Hašková (2010).

[4] Newspaper and magazine articles on reproductive medicine analysed by Lenka Zamykalová (2002) have the following titles: "What Nature Couldn't Do, Doctor Mrazek Can", "Miracles

Reproductive biomedicine is of highly normative character, it reflects dominant social values and arrangements, while at the same time copying and influencing them. It determines who is or is not worthy of biological reproduction (for example by imposing limits on the treatment of infertility or prenatal diagnostics), what is a "normal" child and what its development from conception should be like, or what type of "defect" in a child is undesirable. It defines at what age reproduction is normal, and at what age it is considered a risk or potentially pathological (from results for testing congenital development defects in mothers of a certain age), how a kinship is formed (by rules for the use of donated material, or surrogate mothers for assisted reproduction), how reproduction is organized in terms of space and gender, how a responsible mother or father should behave (for example through the doctor's control in the process of hospital birth, or the case of a father present in the delivery room).[5]

Reproductive biomedicine defines to a great degree the norms of practice of a proper woman and a proper man, and on a general level it maintains the hegemony of the traditional gender order. Taking into account reproduction and the division of labour, we can see that they both are founded on the maintained legitimacy of hierarchic relations between women and men. As in other medical facilities, in the environment of maternity wards, clinics for assisted reproduction and other workplaces connected with human reproduction, the authoritative position of the medical profession (until recently represented entirely by men though rapidly becoming feminized) is legitimized through remarks about the expert, rational (masculine) work of the doctor on one hand, and the care and (feminine) practical experience of the other health professions (on the gendered character of work organizations see Acker 1990). The gender aspect of relations is even more striking in the relationship between the doctor (bound by professional formal rules being associated by masculinity and generically a man) and patient (a woman). In this sense the organization in facilities of reproductive medicine contributes to the maintenance of the hegemonic heteronormative gender order.

in Hloubětín", "The Test-tube Miracle", " Medical Miracles of In Vitro Fertilization are a Commonplace Practice Today", and others.

[5] Ginsburg and Rapp through the concept of stratified reproduction described the ways in which various biomedical technologies used in the field of reproductive medicine maintain and form hierarchies of gender, class and kinship (Ginsburg, Rapp 1995). In their opinion reproduction is organized hierarchically, while fertility, birth-rate or the experience of reproduction in different people is not considered of the same value. See Hrešanová (2008) for more on this concept in the Czech environment.

This opening chapter provides a review of the possible ways to view reproductive medicine from the perspective of social science. It focuses in particular on Foucault's concept of biopower, and on the ways of using it in the analysis and interpretation of practices in the medical profession. It also deals with the concepts of Foucault's successors, such as Brigitte Jordan (authoritative knowledge), Nikolas Rose (new subjectivities), Heather Cahill (the origin of biomedicine conditioned on gender and class social structure) and Paul Rabinow (biopower). Possible applications of their concepts are illustrated by three specific subfields of reproductive medicine: embryo and stem cell manipulation, in practices of childbirth and in assisted reproduction.

The term biomedicine (or also "western" or "allopathic") is used today in the social science discourse for reference to "professional western medicine", where the prefix "bio", emphasizes the fact that this is medicine practiced on the basis of exact scientific disciplines such as biology, chemistry, and physics (Gaines, Davis-Floyd 2004).[6] The term biomedicine refers explicitly to the existence of two fundamentally differing approaches to health care that can be traced back to the era of ancient Greece: preventive and curative (i.e. biomedicine). While the preventive approach focuses on protecting and preserving the health of the entire population, today the prevailing curative (treatment) approach is connected with the classification and treatment of individual ailments of patients, or, with the cure and restoration of a healthy body (Cahill 2001).[7] The biomedical approach to health and illness, so specific to modern western society, is one of the fundamental expressions of modern biopower, the means of the control over and administration of the modern population.[8]

[6] The category of "alternative", or "non-conventional" or "complementary" medicine (CAM – Complementary and Alternative Medicine), includes virtually all other therapeutic practices – natural healing, traditional Chinese medicine, acupuncture, homeopathy, psychotronics, kinesiology, and others.

[7] The well-established terms "preventive medicine" or "preventive therapeutic care" are not precise as they usually include vaccinations, or "preventive surgery" which are also part of biomedical activities.

[8] Interestingly, in the Czech environment the studies of health care and hygiene were cut back considerably within medical education, or even separated from it. For example, in Brno the subject of hygiene is studied at a different university than general medicine. What is left at the faculty of medicine is the subject of nursing, and special non-medical professions. The Medical Faculty of Masaryk University opens only three mandatory subjects (of a total of 59 mandatory subjects in the six-year course of general medicine) which also fall under the specifically-defined sphere of preventive healthcare: preventive and social medical care and public health. During the studies of medicine, nevertheless, some symbolic significance is given to the issue of prevention and health. The subject Health, Prevention, and Healthcare is a part of the doctoral examination in the 10th to 12th semester (information taken from

Biopower and Biomedicine as a Tool for the Control and Formation of Populations

We have decided to base our analysis of reproductive medicine within the Czech context on Foucault's definition of "bios" (the concept of life), on biopower/biopolitics, and pastoral power as a notion for the control over and administration of modern populations (Foucault 1999). In Czech sociology there are many references made to Michel Foucault; even so, a more detailed look at not only the Czech sociology of reproductive medicine uncovers considerable gaps in the application of his concepts in the field of human reproduction. This made us consider the use of Foucault's concepts, especially biopower, for the analysis of contemporary practices in reproductive medicine and the policy of knowledge about it. The examples in this chapter come from both the Czech environment and existing analyses coming from the Anglo-Saxon context. The aim of this introductory chapter is to step beyond the line of works which, in the Czech context (and not only there), merely mention Foucault's concepts as a "required introduction" for the presentation of empirical data. Our book strives to outline and document their possible applications for the analysis of contemporary practices of reproductive medicine in the Czech Republic.

Biomedicine, as one of the key sciences about humans (next to biology or anthropology) is one of the important institutions where modern ideas about scientific and technological progress and professionalization were and are put into practice. Medical knowledge abounds in great power both in relation to individual bodies/persons, and to the administration, control, and normalisation of the society. This way of analysis refers to the Foucault's concept of biopower and the category of "life". The emphasis on bios, the category of the living, stands at the basis of the modern process of forming and administering the population through biopower and biopolitics.[9] Foucault describes biopower as the "controlled insertion of bodies into the machinery of production and the adjustment of the phenomena of population to economic processes" (Foucault 1999: 141).

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the Catalogue of Studies 2010/11 at http://www.med.muni.cz/index.php?id=11). The connection between health and nutrition and the environment can be studied in Brno at the Faculty of Veterinary Hygiene and Ecology of the Veterinary and Pharmaceutical University (http://fvhe.vfu.cz/adresa/sekce_ustavy/uhtml/vyuka.html). At the Medical Faculty, human nutrition is a subject in three-year bachelor's courses, and hygiene is a subject taught in the 4th to 6th year. Hygiene and preventive medicine as such thus can be studied only as part of a special doctoral course together with epidemiology.

[9] For example in the texts *The Birth of Biopolitics* (Foucault 2009), *The History of Sexuality I –The Will to Knowledge* (Foucault 1999) and others.

The author characterizes the process of "the takeover of power over life" by political power of the society that gave itself the task to control life (ibid. 139) in several social areas; medicine is one of them. Foucault writes that biopower, power over life, centres around two interconnected poles: "The first of the poles centres on the body as a machine: its disciplining, the optimisation of its abilities, the extortion of its forces, the parallel increase of its usefulness and its docility, its integration into systems of efficient and economic controls: all this was ensured by the procedures of power that are characterized by the *disciplines*: an *anatomo-politics of the human body*. The second, formed somewhat later, focused on the species body, the body imbued with the mechanics of life and serving as the basis of the biological processes: propagation, births and mortality, the level of health, life expectancy and longevity, with all the conditions that can cause these to vary. Their supervision was effected through an entire series of interventions and *regulatory controls: a biopolitics of the population*" (Foucault 1999: 139). A social area and a context *par excellence* where these negotiations take place is the already-mentioned biomedicine.

Medicalisation, Governmentality, Authoritative Knowledge

Alongside Foucault's analysis of biopower, a critical approach has developed in sociology to the self-presentation of medicine as a progressive institution that fundamentally improves the health and living conditions of people, as well as doubts about the purely altruistic motives of doctors' practices (Dubos 1959; Illich 1976; Cahill 2001). René Dubos (1959) expressed disillusionment with medicine's ability to improve health, and McLachlan and McKeown (McLachlan and McKeown 1971) came up with the sociology of medical pseudo-progress. In the 1970's the concept of medicalisationwas developed – especially in a critical context – which describes the tendency of medicine to expand its domain and monopolize control over areas it previously did not control: birth, dying, menopause, treatment of addiction, mental disorders, and sexual dysfunction (Conrad 1992).

Ivan Illich (1976) made use of the term medicalisation to sharply criticize current medicine: according to him, the medical system stimulatesthe demand for treatment, strengthen the inability to overcome common health problemsor minor pains and the dependence of the population on medical interventions into processes that are entirely natural. Ivan Illich also introduces the term iatrogenic (i.e. life and health threatening) to describe the effects of medical procedures on individual, social, and cultural levels.

The undesirable by-products of medical progress, he said, do not take place as the result of structural or human failure, but are the routine products of the everyday practice of well-trained medical professionals, whilst being immune to any solution. With the growing technologization of medicine and the medicalisation of society, its impact keeps on growing.[10]

The key to the process of medicalisation is the definition: "Medicalisation consists of defining a problem in medical terms, using medical language to describe the problem, adopting a medical framework to understand the problem, or using a medical intervention to 'treat it'" (Conrad 1992: 211). In the process of becoming an object of interest to medical science, patients are not always just passive objects under the power of the professionals: some illnesses and disorders were given medical definitions at the behest of patients. This was the case of post-traumatic stress disorder or chronic fatigue syndrome. At the same time, there is obvious opposition to the medicalisation of some problems, accompanied by efforts to demedicalise them, as in the case of childbirth (the movement for natural childbirth, for instance), homosexuality, anorexia or some mental disorders (Conrad 1992). Active participation by patients in medicalisation and demedicalisation is evidence of the power that medical knowledge has – to define a problem in medical terms means to acknowledge its existence. In the process of medicalisation, people who are malingerers, lazy, unstable or incapable become patients suffering from a particular diagnosis. An illness can sometimes become the source of a substitute social identity (Cockerham 2009). When talking about the process of demedicalisation, though, the seriously ill can become people living an alternative lifestyle.[11]

The concepts of life and subsequently of biopower and biopolitics are important analytical tools for the practice of modern and late-modern differentiation and classification. The process of creating and managing bodies is anchored in the foundation of modern forms of governance and the administration of nation-state populations. In "The History of Sexuality" Michel Foucault (1999) again presented and identified a specific modern form of domination over human life in society, a form of power which makes life and its manifestations visible. However, it is through this

[10] The critical view of the medical system is developed within the sub-field of sociological research on medicine: the political economy of medicine (Lupton 2003). It criticizes current medical system for commodifying health care in order to serve the needs of the capitalist system of production. In this view, financial resources should be allocated towards research on the social and environmental roots of disease, and the maintenance of good health, instead of the exclusive focus of medicine on pharmaceutical and technological solutions to acute symptoms (Lupton 2003).

[11] See Dummit (2006), Epstein (2008) and Jassanoff (2004) for more on these processes.

type of power that life is both created and disciplined in a rational way. In comparison with the traditional pater potestas, this is not random power over life and death, but rather a transfer of personified pastoral power from the monarch to the state, to the productive and rational forming and managing of human lives, bodies and populations. A modern governing strategy, this pastoral power of the state, is understood by Foucault as a strategy of the reproduction of societies through forming a categorized and controlled population from the inhabitants of a politically-defined territory. This strategy works with the help of disciplining institutions and institutionalized forms of knowledge; i.e. with the help of discourses such as demography, statistics, criminology, administration, medicine, education, and others. Foucault points out that this strategy is not in opposition to the individuality of human beings; it forms a self-reflexive type of behaviour (Foucault 1999). His notion of biopower/biopolitics then refers to the emergence of specific political knowledge and new disciplines such as demography, epidemiology, biology, or biomedicine.

In his lectures about the birth of biopolitics focused on the genealogy of the modern state, Michel Foucault elaborated on the concept of government and governmentality useful for the analysis of executing power, starting with the period of Ancient Greece through to modern times. He emphasized two points: first, he demonstrated the reciprocal constitution of power techniques and forms of knowledge. It is not possible to grasp the technologies of power without an analysis of the forms of political rationality which support and enable it. Such mechanisms of rationalization include the ways of verbalizing problems, providing arguments or various justifications andthe specific means for handling problems. For political rationality there is no pure, neutral knowledge that simply "re-presents" the reality of governing. This rationality also produces intellectual tools for processing reality (behaviour, procedures, institutions, legal forms), which later become a part of the technology of politics. Second, the concept of governmentality can be used in a more general sense indicating a close connection between the relationships of power and the processes of subjectification, because in the 19th century the idea of governing had more than just political meaning. It also described the processes of self-control, information and advice for families and children, the management of households, care for the soul, and others. Thus Foucault defines governmentality as conduct, or more precisely "the conduct of conduct", but also as a term that ranges from "governing the self" to "governing others" while focusing on neoliberalism

and its influences on the forms of governmentality[12] (Foucault 2008; Lemke 2001).

Along with Michel Foucault, it is also Pierre Bourdieu (Bourdieu 2000) who emphasizes the importance of power for the functioning of a social structure. He demonstrates this on the concept of symbolic power, the largest part of which is controlled by the modern state through symbolic capital: the power to grant academic titles (for example medical), to accredit disciplines (for example medical, Chinese medicine, and others), or to guarantee or not to guarantee legal disputes (for example lawsuits on the professional competence and accountability of midwives versus physicians). Foucault's ideas about the mutual coexistence of power and knowledge during the forming and administration of individuals and entire populations have fundamentally influenced social studies in medicine. He enriched the analysis of medicine with the concepts of biopower and biopolitics, as well as the idea of what he called expert or authoritative knowledge. The establishment of authoritative knowledge and the devaluation of other systems of knowledge occurs through mechanisms that help in the forming, preserving, and projecting of hierarchic social structures. In the context of reproductive medicine, i.e. obstetrics, the process was described by the anthropologist Brigitte Jordan (1977, 1992a, 1992b, 1993, 1997), followed by a number of other authors (for example Davis-Floyd, Davis 1996; Davis-Floyd, Sargent 1997; Ellison 2003). Authoritative knowledge is the knowledge which gains dominance among parallel systems of knowledge, and becomes a binding norm for practice in specific situations. Establishing authoritative knowledge is a continuous social process that reflects and preserves the relations of power within the community of actors who accept it as a natural or democratically-agreed set of rules. The legitimization of one type of knowledge devalues or totally suppresses other systems of knowledge. Their advocates are labelled as backward, uninformed, or naive troublemakers. According to Jordan, a typical representative of these processes can be seen in American obstetrics in which medical knowledge becomes dominant over other knowledge (for example a woman's familiarity with her own body), and at the same time it delegitimizes all other sources. The fact that one system "wins" over another is not a general rule, as Jordan writes. Some childbirth practices in the Yucatan, for example, are based on the combination and sharing of knowledge of various actors when each of them contributes with their own experience and profession. A similarly-equal sharing of knowledge by

[12] This is especially German post-war neoliberalism, and the difference between the Freiburg and the Frankfurt schools, and the neoliberalism of the Chicago school.

experts is described by the author in her work about a workplace where top technologies are used (Jordan 1992b).

The Research of Medicine in Czech Social Science

For a couple of decades, western sociology and other social sciences and humanities have devoted their attention to the conceptualization of reproductive practices, and to the field where a large portion of it is played out and defined. However, the space for a more consistent application of Foucault's concepts has so far only been partially filled. In fact, it is the use of these concepts that enables better mutual cooperation among researchers and inter-disciplinary understanding of the practice, and the framing of local reproductive medical practices.

As part of local sociological discussion, the concepts of biopower, biomedicine, and normalisation have been applied to social science in a rather limited scope so far, and within partial contexts. Zdeněk Konopásek[13] and Jan Paleček (Konopásek, Paleček 2006) analyse the limits of normality in the field of psychiatric diagnostics and treatment. Jaroslava Hasmanová Marhánková (2008) dealt with the construct of normality and risks in prenatal screening in the environment of the Czech healthcare system. She showed that by refusing the routine application of technologies, women question their key importance for the categorization of pregnancy, and thus can find themselves in conflict with institutions and professionals who are assigned to "care" for them during their pregnancy and childbirth (ibid.). The term biopolitics is mentioned in a treatise that deals with normative expectations in relation to having children and childlessness (Hašková, Zamykalová 2006). However, the authors do not work with the term in a greater depth; they deal here mainly with Foucault's concepts of self-discipline and pastoral power in connection with pro-population measures. The concept of governmentality was later applied thoroughly by Radka Dudová in her analysis of abortions (2012).

Ema Hrešanová also dealt with reproductive medicine, namely with the culture of Czech maternity wards (Hrešanová 2008). In her ethnographic research of the organization structure of two maternity hospitals she

[13] Zdeněk Konopásek acquainted the Czech professional public with the studies in this field by publishing a number of translations of texts on the topic in the journal *Biograf*. This Czech professional periodical regularly analyses topics connected to health, illness, and medicine. However, the journal's approach is inspired mainly by so-called science and technology studies (STS).

described the social interactions, the process of expecting mothers getting accustomed to the maternity ward environment, relationships among the actors of childbirth, as well as the process connected with the profession and status of doctors and midwives (and with her colleague she also targeted social inequalities among women in labour, Hrešanová and Hasmanová Marhánková 2008). Iva Šmídová analyzed the changes in childbirth within the institutional environment of maternity wards, and the re/production of the gender order after the normalisation of the presence of fathers in the delivery room (Šmídová 2008a). Lenka Zamykalová (Zamykalová 2003) focused on defining the limits of normality in the environment of assisted reproduction and embryo manipulation. The negotiation of partner and gender roles in the context of infertility and assisted reproduction was taken up by Lenka Slepičková (Slepičková 2009, 2010).[14]

Karel Čada focussed his attention onmedicine policies in the context of two processes that characterize the two-way relationship between society and medicine: the medicalisation and socialization of medicine (Čada 2009). While Čada uses the concept of medicalisation in the same vein as defined by Conrad, in connection with Parsons' theory of labelling, and later elaborated by Illich or Lupton, he describes the concept of the socialization of medicine as the opposite to the concept of medicalisation, and suitable for the description of how society influences medicine today. This pertains both to a call for broadening the rights of patients as well as their inclusion in the decision-making process of their treatment, and the social determination of various diagnoses, but also toways of treatment, the effort to demedicalise some issues and the popularity of alternative ways of treatment.

The text by Zuzana Parusníková (Parusníková 2000) presents the concepts of Foucault's biopower or Beck's risk society in relation to today's cult of health linked to the ecological dimension. The research by Eva Křížová (Křížová 2002, 2006a, 2006b) is devoted to the broader implications of the professional identity of doctors, or the relationships between alternative medicine and biomedicine. Eva Šlesingerová (Šlesingerová 2005, 2008) analysed popular representations of the genome, the embryo, and DNA, while pointing at present forms of negotiating boundaries for group identities, and the limits of humanness. Other research studies applying the concept of biopower, biosociality and biological citizenship

[14] Iva Šmídová studied gender relationships and family and partner strategies of care as part of a dominant essentialising approach to gender in the Czech environment (Šmídová 2009), and the "essential nature" of maternal care, and the "biological unfitness" of fathers to care for the newborn (Šmídová 2008b).

that have recently been conducted in the Czech context, include the project of Kateřina Kolářová and Jaroslava Hasmanová Marhánková *Biological citizenship: forms of governance and resistance towards biomedical lead in the context of the Czech Republic*.[15]

The sparse analyses of Czech reproductive medicine that indicate the employment of biopower, and represent a medicalised world and the one-sided use of technologies, call for additional research. At the same time they present an opportunity to seek ways of interpreting and understanding these processes in the area of reproductive medicine with the help of the conceptspresented. In the following chapters we will focus on several specific areas of reproductive biomedicine, and show in which direction the analyses of biopower (Foucault a Rabinow) and related concepts (Jordan's authoritative knowledge, Rose's new subjectivity, or Cahill's interdependence of biomedicine on gender and class social structure) may proceedfurther in the Czech environment.

Conceptual Inspiration for the Analysis of Specific Areas of Reproductive Medicine

The texts by Michel Foucault (Foucault 1999, 2007, 2009), Paul Rabinow (Rabinow 2003), Nicolas Rose (2007), Ivan Illich (Illich 1976), Thomas Lemke (2011), Sarah Franklin (2013) and others, deal with a specific form of modern power which arose for the purpose of managing the population of the newly-emerging nation states. Governmentality, as this term is used by Michel Foucault (2008), is a demonstration of the effect of power and knowledge within the specific circumstances of the planning, control and administration of living people – the population. Birth rates, death rates, demographic statistics of illnesses, pathologies – all these are instruments of biopower; a power that defines and creates conditions for life, and the administration of population reproduction.

Today's practice in reproductive medicine in the Czech Republic is a prime example of a radically medicalised area of human life and the application of biopower within the context of medicine. It combines two aspects of biopower: the anatomo-politics of the human body and the biopolitics of population. It focuses on improving the effectiveness of the human body in the area of reproduction, and "remedies" individual reproductive dysfunctions (meanwhile it is indicative that we speak of

[15] http://gender.fhs.cuni.cz/KGS-11.html

remedy rather than of cure). Within this process, the female body is seen as a machine built to conceive, carry to term, and "deliver" a "healthy" baby (Cahill 2001; Davis-Floyd 1992), preferably under the bright lights of the maternity ward and under the supervision of the doctor who, by weighing, measuring, recording, and disinfecting, incorporates the child into a world controlled by biomedicine. Any change in the hospital organization of child birth is evaluated through the lens of whether it increases the child mortality rate (Czech obstetrical practice has ranked long term in the highest positions of international statistics approaching zero in these criteria)[16], while the wellbeing the actors involved (the mother, the newborn, and their family) is disregarded. At the same time, contemporary Czech medicine monitors in detail the overall reproductive capability of the population expressed in specific numbers. It determines the age limits for healthy or potentially pathological reproduction, and the options for making use of the techniques of assisted reproduction. It works with statistics and graphs expressing rates of successful reproduction according to age, it limits access to assisted reproduction to those whose reproduction is not regarded as desirableand rewards or penalizes various types of reproductive behaviour (Zamykalová 2003; Hašková, Zamykalová 2006, Hasmanová Marhánková 2008).

As part of applying the above-mentioned concepts on reproductive medicine, it is necessary to study how trust is established in the system of modern reproductive medicine, how the status of biomedicine is normalized, how the normality of such governance is established through biomedicine and through what means the categories of status, gender, and ethnicity enter the process. Let us outline the possibilities of using analytical tools introduced in the text in three areas of reproductive medicine: 1. issues of embryo or stem cell manipulation, 2. delivery room

[16] The statistics register the deaths of live-born babies within 6 days of birth, (and then between the 7th and 28th day, called late-neonatal mortality). The crude rate of neonatal mortality (the number of deaths within the first 6 days, and within 28 days per 1000 live births) is very low in the Czech Republic: 1.00 of deaths within 6 days (1.81 within 28 days). In Germany and The Netherlands, where home births and births in birth houses are more common, the numbers are also low: 1.97 within 6 days, and 2.59 within 28 days of birth (Germany), and 2.11 (2.82) in The Netherlands (data for 2008, in *Zdravotnická ročenka ČR 2009, 2010* – Medical Yearbook of the CR). The first number puts us in second place in Europe after Luxemburg; as for infant mortality rate (death within the first year), the Czech Republic is in 7th place (ibid.). There is an on-going "competition" over per milles on the European scale. In the Czech Republic, the biomedical emphasis on these numbers conceals the facts that are not registered by any statistics: What can these statistics tell about the quality of life of the newborn, or about the process that helped them to this world.

practices, and 3. assisted reproduction.[17] We will link the three chosen topics on various analytical levels because of the differing contexts which pertain to these three realms. For example, the negotiation of the status of the embryo is captured mainly, and in a privileged way, by medical science discourse. Cases of crossing the boundaries which are interesting to the public are covered by public discourse through the media, politics, and the popularization of science. In simple terms: it is not possible to investigate the subjective status of the embryo as such. However, in the case of the assisted reproduction or childbirth, we must take into account also the everyday perspective of actors who live and reflect their situations.

The conceptualisations can be used for the topic of embryo manipulation in connection with the concept of "life" (bios). Their application will be beneficial for reproductive medicine in the analyses of handling, practice, and negotiation of the status of the embryo, the issue of stem cells, etc. The discourse of biology and genetics becomes more and more a language describing humanity, the effects of environmental change, and the future of reproduction (Nelkin, Lindee cited from Franklin, Lury, Stacey 2000: 189). Within the process of assisted biomedical reproduction, an important role is played by the phase of pre-implantation diagnostics,[18] which represents a new way of handling human embryos. It poses new questions regarding the boundaries of humanity, the issue of kinship, and the definition of health and illness (Zamykalová 2003). Within biosociety (Rabinow 2003a, 2003b) the embryo becomes a borderline object, a part of different worlds: on the one hand an object of negotiating and normalising moral values, on the other hand an object of a scientific description of the world, and the place in it for humans (Williams, Wainwright, Ehrich, Michael 2008), all this as part of the research on stem cells when these are placed on the border of a definition between a human being and the idea of an embryo as a mere cluster of cells. The embryo has become an object of science as well as an object of morals and ethics (ibid.). The negotiation of the social,

[17] We are aware that this field of study includes a number of other interesting and relevant topics (puberty, menstruation, contraception, menopause, pregnancy, reproduction of DNA in the national genome, and others). We cannot deal with all these topics in detail, and we would welcome the work of our other colleagues on these issues.

[18] In the process of assisted reproduction, Czech law requires every couple to undergo a genetic examination. The donation of reproductive cells is permitted and regulated under law no. 20/1966 on the Healthcare of Citizens, as amended. In accordance with this law and according to international norms (for example the Agreement on Human Rights and Biomedicine, Directive of the European Parliament and Council 2004/23/EG on the Setting of Quality and Safety Standards for the Donation, Sampling, Analysis, Processing, Preservation, Storage, and Distribution of Human Tissue and Cells), a program was created in this country for the donation of reproduction cells. (http://www.gennet.cz/).

clinical, biological, and moral status of the embryo reveals a connection between the concept of a human, the human body, health or illness in modern biomedicine. At the same time, these negotiations have given rise to dilemmas that the definition and manipulation of a human embryo have to struggle with.

Another key area in reproductive medicine is obstetrics. In the Czech environment this social field is clearly dominated by the approach of medical doctors to childbirth. It is an area of human life that is almost entirely medicalised (Conrad 1992). Social science analyses describe a paradoxical development in which childbirth, historically and culturally the domain of women, taking place in private, became a strongly masculine gendered matter.[19] What is more, it has been taking place in the masculine, formal and hierarchical, institutional setting represented, until recently, exclusively by men in the status of doctors (Cahill 2001, Winnick 2004). This is despite the feminisation of the profession, since the symbolic gender of representatives of the professional authority remains masculine in the requirement and aspiration to rational action and formal expertise. Authors on the subject point to the unequal power positions assigned to various actors and types of skills in this field, especially the historical disproportion between formal university education (the doctors' guild) and practically-gained knowledge (midwives, nurses), and to the seriously imbalanced character of these relationships (ibid.; Fisher 2009; Reiger 2008). A repeated

[19] As indicated in the introduction, the actions, performance, responsibility and control on the part of doctors, and the empathy and sensitivity on the part of other healthcare personnel, are not mere neutral attributes of contemporary work positions, and indicators of the degree of professionalism. They refer to the traditional division of labour along the gender line that holds a clear position of value on a scale of prestige.
Among doctors in the field of obstetrics, hospital gynaecology, or reproduction technologies there have been an increasing number of women doctors. This does not automatically imply that the hierarchy of positions in these organizations will lose a clear gender structure (heads of clinics and institution directors are men whose career success is in line with socially-desired human biographies). It does not mean either that we will start judging women doctors without the lenses of gendered expectations primarily as (potential) mothers who should prioritize their children in exchange for a career. This view is often shared by both women and men doctors, and in the Czech society they are no exception.
As for childbirth, institutionalized gender can be found in the rules of the organization itself, and in the treatment of clients (Acker 1990). In the Czech Republic it is common practice, explicitly welcome by doctors, that a woman about to give birth to a baby turns with confidence to an official institution and its personnel, expecting a guaranteed, risk-free, problem-free "result" based on their expert knowledge and an array of authority insignia. The characteristics of passive-active, emotional-rational, particular-universal, individualism-collectivity (the classic Parsons dilemmas of orienting the actors in their roles (Parsons 1951, 1955) that depict this relationship as clearly unequal), can be matched with particular actors, and together with Bourdieu, also the respective gender (Bourdieu 2000).

target of sociological research on obstetrics has been the mechanisms which reproduce the dominance of the medical approach over alternative, midwife-assisted birth methods (Donnison 1977; Cahill 2001; Reiger 2008; Davis-Floyd 1992; Davis-Floyd, Sargent 1997; Jordan 1993; in the Czech arena Hrešanová 2008, or earlier Hašková 2001a, 2001b).[20] No matter how much these two approaches oppose each other, it is useful to focus on the means by which trust is established in the first instance, and the way in which alternative approaches are excluded; and, at the same time, how new knowledge and approaches in the area of obstetrics are adopted or rejected in the hegemony of biomedicine.

The hegemony of biomedicine is reflected also in the symbolic system for analysing the practices of giving birth and the knowledge surrounding it. This has been described in Winnick's study (2004) on the "language" of birth and the usage of terminology related to it. On one hand there is the (biomedical) term "to deliver a baby", on the other hand the alternative term "a woman gives birth", with each connoting a different attitude towards the mother, the child, and the attending personnel. The mother either merely "delivers" the child to the world, she is the object of experts, or she is the key player in the entire process (Šmídová 2008). Analysis of the process of negotiation within the biomedical approach to childbirth requires mapping out the established power of biomedicine (with its potential challenges for change), and the mechanisms used to maintain it in the field of obstetrics, as well as focusing on the hegemony of status, ethnicity, and especially gender in this social field (see Carrigan, Connel and Lee 1985; Connell and Messerschmidt 2005; Hearn 1983, 2004, 2008).

The contemporary practice of biopower and biopolitics is demonstrated in the discourse for negotiation between the differing concepts and practices of birth. A good example from the Czech experience is home births, well covered by the media. The dominance of the biomedical approach is shown by Czech health statistics, mentioned above, which, aside from their primary attention to mortality rate (e.g. the first set of tables on neonatal mortality in the key annual publication of *Rodička a novorozenec* – The Mother and the Newborn) record only "childbirth outside a medical institution" (about 3.5 per mille of all live-born babies). There are no official statistics for planned home births. The commentary on this category in current publications is this: "A number of these births are 'accidental', which is shown by a number of prematurely born babies outside of any medical facility" (*Rodička a novorozenec 2009*, 2010: 23). In 2009, a total of 415 live

[20] Obstetrics is also a topic for historic analysis, for example books by Tinková (Tinková 2010), or Doležal (Doležal 2001).

babies were born outside of medical facilities (4 stillborn), of which 368 with a birth weight of 2.5 kg and more, 32 babies were between 2–2.5 kg, which leaves only 15 with such a low birth weight that they can definitely be ranked among unplanned deliveries (ibid.: 104–5). Therefore, almost 87 % of these children may not have been an "accident", with a proportion of them representing planned home births. Those, however, have not been allotted a separate category, a legitimate spot in the official birth rate statistics. What we see here is an example of the exclusion of representatives of other forms of knowledge which, according to Jordan, is in line with the practice of maintaining authoritative knowledge (Jordan 1993).

The exclusion of alternative approaches to child delivery, and ignoring the attitudes and values of women as actors, women clients, points to the practice of biopower by the state and the law, for which the transfer of responsibility for childbirth to the expert system is typical. This type of governmentality pushes forth a standardized and instrumental character of approach to childbirth, to mothers, newborn babies, and fathers. This also occurs through the unequal negotiation of the hegemony of two antagonistic discourses: home births versus births in maternity hospitals.

Reproductive medicine includes in this volume, aside from embryo manipulation and the practice and framing of childbirth, its exponentially-growing section – assisted reproduction. Infertility treatment is the ultimate example of an area of human life that has been controlled by medicinein recent decades, together with new findings in reproductive medicine that enabled in vitro fertilization. Until then, a couple's infertility was considered a stroke of fate one had to overcome. Today it is a technical problem that can be solved with the help of the latest medical technologies, or at least can be attempted. Doctors can work with a much broader scale of steps and techniques than what is acceptable to patients from a technical, financial and psychological view. The treatment can never be "good enough", and all the options never fully exploited (Sandelowski, Holditch-Davis, Harris 1990), which puts pressure on the patients to try as much of what is being offered to them as possible.

In the second half of last century, infertility as a private problem turned into a public problem which is amply covered by the media. Few people are unaware today that the quality and sperm count of the ejaculate is declining sharply, and the number of IVF children is increasing from year to year. The quantification of fertility/infertility of the population, the distribution of "blame" for the increasing number of problems with conception, or the process of treatment and the issues of coverage by the public health insurance, is an excellent field for studying gendered roles in reproduction,

the biological management of the modern population, or the hegemony of biomedical knowledge. The laws that stipulate who is or is not eligible to undergo treatment (in the Czech Republic there are specific requirements regarding the age of the woman, as well as the type of partner relationship that may undergo treatment), reveal which mode of reproduction is in the public interest, and which is not.

The bio-political laws stipulating certain limitations to assisted reproduction are benevolent in comparison with the limitations in other countries (procedures of assisted reproduction areallowed involving the donation of sperm and eggs). The decision of what is an indication for treatment, or when treatment has no hope of success, as well as the range of techniques used, is to a great extent up to the doctorsin the Czech Republic. Doctors admit that their practices do not always correspond to the official limits, that their evaluation of specific cases is individual, and that they provide treatment even at the cost of violating official regulations. This is most often the case with assisted reproduction for women with no partner, or for women exceeding the age limit, shared-assisted reproduction for lesbian couples, and "surrogate motherhood".[21] Depriving the medical profession of some of its liberties in the process of deprofessionalising doctors is outbalanced by allowing new liberties in which the doctor moves around autonomously and can pursue various interests.

Conclusion: Critical Thoughts on Studying Czech Reproductive Biomedicine

The so-far published, albeit few, sociological studies reveal that reproductive medicine practiced in the Czech Republic is strongly biomedical, it

[21] In the research of Lenka Zamykalová (Zamykalová 2003) doctors evaluated individual life situations (age, partnership, tragic events such as the loss of a child or children) of individual applicants for treatment (women). Information about the practice of shared motherhood comes from an informal interview with a health professional (a woman) of a Brno centre for assisted reproduction. The practice of surrogate motherhood in Czech clinics of assisted reproduction was described by doctors Pilka and Mardešič to the participants of a conference on assisted reproduction held in Brno in November 2008. Their account was a reaction to a conference contribution. It became obvious from their testimony that this sort of practice is nothing exceptional and is not considered as breaking the law. "The Czech legal system recognizes institutions which make surrogate motherhood possible, if steps are suitably timed", professor Mardešič said. The magazine *Týden* [The Week] published a report on surrogate motherhood in the Czech Republic on 21 December 2008. The report contained anonymous interviews with several surrogate mothers, and with a parental couple (Ševela 2008).

commodifies health and illness, and is of strikingly normative and authoritarian character. At the same time it deals with the key social issues of every person's life, it is the topic of public discussions and is celebrated as a field of medicine that triumphs over the whims of "nature". The intention of our introductory text and the empirical chapters following it is to inspire Czech researchers by providing them both with a conceptual framework for a relevant description, analysis, and interpretation of the application of power and the negotiation of the legitimacy of biomedical hegemony in the social field of biological reproduction. Moreover, it aims to offer them particular empirical evidence analysed in the subsequent chapters that demonstrates the applicability of the selected concepts to enable a better understanding of the processes and mechanisms relevant for the social analysis of human reproduction and the sets of authoritative knowledge involved in it.

It is risky to do sociological research in the field of medicine. The nature of the debate is strongly influenced by the authoritative rhetoric of doctors speaking from their privileged, expert positions abounding in great symbolic capital and in the specific potential of a certain type of power and knowledge.[22] Biomedicine decisively influences the establishing of boundaries between health and illness, normality and pathology (tests for congenital defects in embryos, and the imperative of induced abortion), desirable and undesirable (is it alright to become pregnant with the help of IVF after the age of forty?), the subjectivity and objectivity of life (ethical issues over the manipulation of stem cells and embryos). Doctors in the field of reproductive medicine work with sensitive and socially-significant, morally-encumbered relationships and concepts such as parenthood, kinship, fatherhood, and motherhood. Their actions raise a number of ethical and legal issues. At the same time they wield enormous power given by the circumstances of their knowledge, their use of advanced

[22] Czech researchers in the field of sociology of medicine have repeatedly expressed disillusionment over their research topics and results being systematically marginalized among medical professionals. Medical facilities (including university hospitals and educational facilities) regard sociologists as "service technicians" whose main task is to prepare steps for the collection of data in medical research (source: information spoken at a thematic seminar, and co-author's own and mediated experience from presentations at medical conferences). The hierarchy of disciplines, as well as competition among researchers in an overlapping field of research becomes an arena where established positions of power are changed very reluctantly. Within the field of sociology itself there are power-games played over which type of sociology is the true one, and which method is more exact, as was fittingly described in the telling text by Zdeněk Konopásek *Sociologie jako power play* (Konopásek 1996), [Sociology as Power Play], or a later text by Marek Skovajsa about the parameters of good (Czech) sociology (Skovajsa 2007).

technologies, as well as their influence on public discourse. In the media, reproductive medicine is depicted as a profession of prestige, both in regard to the latest technological progress, and with their successes often seen as "miracles". Reproductive medicine also strongly influences public discourse and the perceptions of the risks connected with reproduction – not only is it well-known that the fertility of men is historically declining, while the fertility of women is linked to their age, but many potential parents try to improve their reproductive capability even before the beginning of their efforts to conceive on the basis of medical recommendations that appear in the media.

The range of power available to reproductive medicine is, compared to other areas of medicine, very broad: it affects everyone, there is no self-treatment, everything is medicalised, almost all women give birth (and many couples conceive) under the supervision of doctors. There is even a pre-pregnancy medical supervision now, and the system of care during pregnancy is organized in detail and governed by extensive norms, as shown by Hasmanová Marhánková on the example of prenatal screening (Hasmanová Marhánková 2008). At the same time reproductive medicine is an extraordinary example of a field of medicine penetrated by the private money of patients who are required to pay from their own pocket for all procedures not covered by their insurance. Reproductive medicine is the domain of modern and financially-demanding technologies, constantly improved through intensive research.

The opening chapter has introduced a way how social science can use, in a constructive manner, selected analytical means for the understanding of the situation in contemporary reproductive medicine in the Czech Republic. On the level of three separate research topics – childbirth, assisted reproduction, and human DNA and embryo manipulation – we have shown how the concepts of biopower, biopolitics, medicalisation, and governmentality can help in the understanding of social science analyses of reproductive medicine. On a general level, as shown by Paul Rabinow and Peter Rose in their text Biopower today (Rabinow, Rose 2006), the field of human reproduction is understood as a key area in which power is imposed on the population and individuals. Rabinow and Rose base their text on Foucault's analysis of sexuality. It was the "dispositif" of sexuality that Michel Foucault took as the key analytical tool for the study of reproduction, both individual and of entire nations, which links anatomo-politics and biopolitics. According to Rabinow and Rose, though, about fifty years after Foucault wrote his texts, the issue of reproduction got rather separated from sexuality, and has to face new challenges. For example, in

the context of diagnosed infertility, assisted reproduction becomes an issue of autonomous personal choice which is proof of the manifested ability of medicine and the national states to control the situation of reproduction on a general level, through a population optimum, birth-rate regulation policies, commodification and legislative amendments of egg and sperm donation, and others. A new area of biopower has appeared in pre-implantation diagnostics, in particular DNA analysis and human stem cell and embryo manipulation (Rabinow, Rose 2006: 208–212).

Thanks to these concepts we can reflect in sociological terms on the institution of medicine, which stands at the very foundations of the constitution of a modern society. We can reveal its specific field that deals with the control, administration and commodification of the life of the population, illustrated here specifically on three issues encompassing the broad field of reproductive medicine. At the same time we take into account the progress of social theory, and the analyses of western biomedicine, as proposed, in the last thirty years, by Michel Foucault, Ivan Illich, Nikolas Rose, Thomas Lemke, Sarah Franklin, Rayana Rapp, Brigitte Jordan, or Heather Cahill, and the way these concepts are applied in critical thought on processes that form the background of the everyday practice, prestige and power of reproductive biomedicine.

CHAPTER THREE

Biopower, Life Itself and Reproductive Biotechnologies. The Concept of Life and the Genomization of Society

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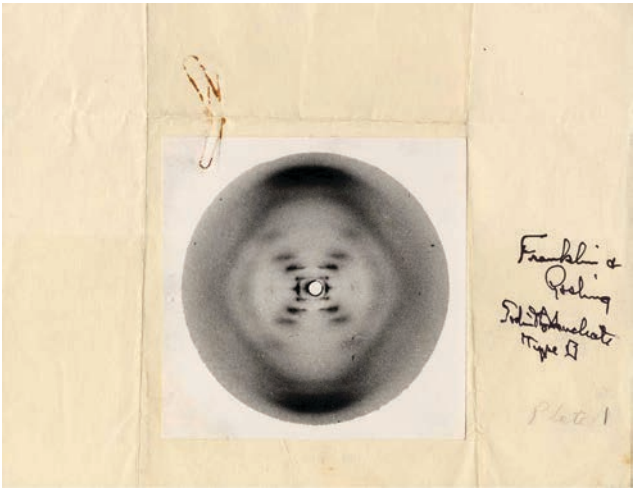

Figure 1: First image of DNA made by Rosalind Franklin.
Source: lifesciencesfoundation.com

In the following chapter, the conceptual tools and analytical framework mentioned in the previous text – mainly biopolitics/ biopower and the idea of life itself – will be reflected. Our analysis of Czech reproductive medicine presupposes a more extensive understanding of the social forces and forms of power (governmentality) which are defining, governing, and naming human embodiment in society and politics. Therefore, the concepts will be analysed in connection with social processes, such as the post/genomization of society and broader biosocial changes in our biosocial societies.

In 1953, based on the data from Rosalind Franklin and Maurice Wilkins, James Watson and Francis Crick built a model of deoxyribonucleic acid, for which they[23] were awarded the Nobel Prize in Physiology and

[23] All of them, except Rosalind Franklin.

Medicine in 1962. In terms of natural science, this discovery was one of the most important events of the 20th century. In half a century, the ideas and metaphors of DNA in popular representations have mingled in the public arena to such an extent, that a number of authors talk about the genomization of society (Anker and Nelkin 2003; Nelkin and Lindee 2004; Atkinson, Glasner, and Lock 2012) or even genocracy (Kac 2007). The phenomenon of the genetisation of society is of interest to the social sciences also because it is part of a broader scale of phenomena related to the specific administration of the modern population through ideas about physical existence, the concept of life. An emphasis on the body and the bíos, i.e. the category of life itself, underlies analyses of the modern process of creating and governing population through biopower/biopolitics – the type of power described by Michel Foucault in his texts. In his book *The Order of Things: An Archeology of Human Sciences* (2007)[24], he identifies three discourses, in terms of which the "human" has been constituted in the late classical period. Foucault thinks the human appears at the intersection of three domains: *life*, *work* and *language* where the human is constantly and elusively merging and being born as a sovereign *subject*. It seems the West saw the concept of "one body, one self"[25] as a given until most recent times; this, however, evolved within historical development which has its origins in the Renaissance and which was consolidated during the Enlightenment. The idea of a *sovereign subject*, an autonomous being whose autonomy is proved particularly in its exercise of will, actions and choices, and in certain forms of dominance and submission, appeared during this period. Thus, Foucault introduced the discursive formation of "human"(anthropos) into social and cultural theory, and emphasised the role of the category of life itselfwithin this perspective. Life/*bíos* became the category of governing, administration and analysis; the humans and the character of their humanity became the theme for the human sciences, such as anthropology, biology, and medicine[26].

[24] In French in 1966.

[25] This concept of "one body – one self" is not universally applicable to all cultures in the world. In *The Mindful Body: A Prologomenon to a Future Work in Medical Anthropology* (1987), for example,the anthropologists Nancy Scheper-Hughes and Margaret Lock describe the relationship between the physical existence and self in different cultures as very diverse. For example, the Zinacanteco tribe understands the body as an entity inseparable from the soul, which has thirteen parts, consisting of a reservoir of deceased souls; the individual is not a unique being, but a fragment of the social world of Zinacanteco. Likewise, the Bororo tribe or the Cuna people know eight different selves matching the parts of the human body (intellectual/head, thief/hand, romantic/heart...), etc. (Scheper-Hughes, Lock 1987).

[26] The debate about the human as a specific character also inspires reflections on the concept of anthropos or elaborating on the ideas of humanity. A number of philosophers have

Foucault's reflections on life categories were largely inspired by the work of the French historian, medical doctor and philosopher Georges Canguilhem, who wrote his essay "The concept of life" examining the cultural analysis of "life as a productive force"[27]. In the genealogy of the idea from antiquity to the present, Canguilhem highlights the peculiarities of the current understanding of the topic of life, which is influenced by the perspective of molecular biology and genetics in the modern era. He emphasises the role of the modern biological model of life, based on the fact that it is *an information model* (Canguilhem in Franklin, Lury and Stacey 2000). Canguilhem was one of the major French social scientists dealing with the history of scientific knowledge and epistemology in general, and he influenced the work of a number of other theorists, and philosophers.[28] Canguilhem also dealt with the formation and creation of ideas in science, their transformation by the scientific discourse and various ideologies, and last, but not least, the origin of scientific facts. In his texts from the 1970s, he convincingly shows the extent to which theorists and laboratory scientists are influenced by their efforts to achieve the desired results, which are consistent with unscientific concepts. The role of ideology and the relationship between epistemology and history of life sciences are directly confronted with many examples, from the scientific revolution to the new era of genetics (Canguilhem 1988, 1991).

Canguilhem has inspired a number of other philosophers, anthropologists, and sociologists dealing with the changes in the concept of life itself, the reflection of the current biosocieties, and the emergence of modern biology, and those who study the impact and social implications of new biotechnology and biomedicine in the context of reproductive medicine, etc. They include, for example, Monica Greco, Paul Rabinow, Nikolas Rose, Stefan Helmreich, Nik Brown, Andrew Webster, Marilyn Strathern and Marcia Inhorn, Rayna Rapp, and many others[29]. In *Ensembles*

taken part in the debates since the end of the World War II, from Jean-Paul Sartre, Martin Heidegger and Jürgen Habermas to Michel Foucault, Donna Haraway, Bruno Latour, and Peter Sloterdijk.

[27] For example, in his text *What was life? Answers from Three Limit Biologies*, the anthropologist Stefan Helmreich shows that the question "What is life?" has been part of biology or the subject of interest at least since around 1800, and it has altered from naturalistic, essentialist concepts to a virtual, bio-information, synthetic concept. The text *What Is Life?* (1944) by Erwin Schrödinger suggested "that life might issue from a hereditary "code-script," which conception became in subsequent years enlisted into models of DNA and into informatics and cybernetic visions of vitality more generally" (Helmreich 2011: 674).

[28] E.g. Michel Foucault, Gilles Deleuze, Jacques Derrida, Pierre Bourdieu.

[29] Examples include: *What Was Life? Answers from Three Limit Biologies* (Helmreich 2011), *After Nature: English Kinship in the Late Twentieth Century* (Strathern 1992), *Assisting*

of biosocial relations, the Icelandic anthropologist Gísli Pálsson (Pálsson 2013) elaborates on the possibility of overcoming the boundaries of dualism between nature and culture, and biology and society, and he reflectson the concept of biosociality. He is inspired by Paul Rabinow, who claims that the advancing artificiality of life itself, materialising in reawakened genetics, is a key step in overcoming the dividing lines between nature and culture. Although there has been a detailed examination of the concept of the "social" in recent years, ideas associated with the "biological" have largely remained stable and conceptually unchanged in essence.

In this context, Pálsson describes the development of ideas about life in Western epistemology from alchemical symbolism and the coexistence of art and science to the emergence of the modern evolutionary biology and science of Darwin and Galton, who invented the new "epistemic space", when they made the category of heredity the centre of debates about life and influenced the emergence of anthropology as "one of the *hot spots*" of modern human sciences[30]. Pálsson shows the development of the biologisation of life up to the present, when new genetics and molecular biology have emerged and when there is still powerful symbolisation of both the genome and DNA (the "book of life", "matrix of life"), and the key term of modern biology – the cell, which is closely linked to the concept of individualism and the autonomy of a living organism. At this point, Gísli Pálsson builds on Canguilhem's reflections and uses an example inspired by his description of the history of the concept of the cell as an essential element of life. He shows how Canguilhem describes the social history of the concept of cells as a concept borrowed from the description of hexagons in beehives in an attempt to represent the autonomy and viability of the part in conjunction with the whole. The individual parts (bees, drones, the queen, or honeycombs) mutually coexist, thus ensuring the survival of the whole organism. But it is not a trivial organic metaphor of the union of autonomous bees and drones who intentionally agreed to build a hive, but a description of the historical genealogy debate about a living organism.

There are many other philosophers, anthropologists, or sociologists inspired by Canguilhem who analyse the topic of life and its cultural symbolism, e.g. the sociologist Sarah Franklin who deals with the concept of life itself, biopolitics and reproductive health in a number of her books

Reproduction, Testing Genes: Global Encounters With New Biotechnologies (Fertility, Reproduction and Sexuality) (Inhorn, Birenbaum-Carmeli 2009), *New Medical Technologies and Society: Reordering Life* (Brown and Webster 2004), *The Social Worlds of the Unborn* (Lupton 2013), *Anthropos Today: Reflections on Modern Equipment* (Rabinow 2003), *The Politics of Life Itself* (Rose 2007), etc.

[30] From legal terminology.

and texts. She argues that the *fact of life* in modern times is biologised in such a way that e.g. the beginning of life is represented as a story of evolutionary natural selection. Likewise, the beginning of every individual life is explained in Western epistemology in biological terms as conception, i.e. the union of an egg and sperm, leading to the subsequent development of the embryo and foetus. These interpretations show a unique (genetic) project, through which different individualities are shaped. They also correspond with the *natural* fact of human diversity, the fact of life and the evolution of Homo sapiens, i.e. with the discursive framework of biology (Franklin in Franklin, Lury, and Stacey 2000). Franklin deals with a comprehensive analysis of the contemporary forms of biopower in the context of reproductive biotechnology also in other books, e.g.: *Biological Relatives: IVF, Stem Cells and the Future of Kinship* (2013) or *Born and Made* (with Celia Roberts 2006).

The concept of life as a political and cultural category is currently very effectively associated also with the concept of DNA as a synonym, a metaphor for life. DNA and the genome function as language and as visual tools describing the basic expressions and limits of life itself. The genetisation of nature and the fact of life are inseparable from their objectification and instrumentalisation (Rabinow 1996). Genes become a prominent part of the vocabulary not only of genetics, but also of popular culture, and the number of areas influenced by them is rapidly growing. Instrumentalisation becomes an integral part of the capitalisation of our own lives, and the commodification of genomics intensifies international scientific competition for the division of the biotechnology market. Governance and administration, the method of governmentality of genetic threat/risk by mapping and sequencing the human genome and the genomes of plants, animals and micro-organisms, are one of the principal forces of Western biomedicine in the 21st century. It drives the effort to protect new forms of bio-capital and bio-value in the form of genetically modified food, regenerative medicine, pharmaceutical products, or the administration of human genetic material (Franklin, Lury, and Stacey 2000; Brown and Webster 2004; Pálsson 2007; Waldby 2002, etc.). In the 1980s, Edward Yoxen already showed that these shifts in the definition of life itself had both their institutional and conceptual roots in the modern history of biology, pointing to the new definition of *life as information*, i.e. as a cognitive category. Yoxen describes the rise of molecular biology, and he is convinced that "it can be described as meta-biology, an information-theoretical idiom", "creating a new language for the analysis of nature" (Yoxen in Franklin, Lury, and Stacey 2000: 189). The consequence of this view is the reduction of life to

genes and the reduction of genes to information, which leads not only to the displacement of the concept of natural history of compact units, such as species, populations, and ecosystems, but also to real and metaphorical possibilities of the vision of *reprogramming biology, and life*. To perceive life as biological information also means to perceive DNA and the genome as a kind of information about the body, the human. Many natural scientists and science popularisers and players in the public discourse still use the metaphor of deoxyribonucleic acid as a code, language, or text, sometimes even with a given destiny.[31] Is DNA a code from which the essence of life can be derived? It is a fact that DNA is perceived as the text and code of life by the current hegemonic biological paradigm – i.e. Neo-Darwinism. But even in biology itself, there are schools that perceive human life, symbolised by DNA, as a symbol and the fact of life as a creative and hermeneutic effort to interpret the code. In the Czech context, these include the well-known and influential Portmannian biologists (and Portmann's followers, Neubauer and Markoš). In this paradigm, it is possible to find the concept of DNA as part of the so-called *hermeneutics of life*, i.e. an attempt to understand *how* DNA is read/interpreted by the body itself. Its representatives have doubts about whether the neo-Darwinian concept of DNA as a matrix, a clear text, meets the conditions of a natural language.[32] The supporter of the so-called hermeneutics of life, the biologist Anton Markoš, finds it neither possible to identify life with DNA, nor argue that "the code created life", as understood by a number of geneticists."Something similar applies to the genetic code and software, a human language or any other code table. A triplet of nucleotides (and their difference from other possible triplets of nucleotides) does not suggest what amino acid it will encode. Morse code dots and dashes are not any more similar to an encoded letter than any other letter. The word "hare" has no resemblance to an actual hare (which, after all, can be seen in the fact that each language uses a different word for it)."[33]

[31] Although the exact meaning of various analogies is not often clear, it is interesting to ask if DNA meets the criteria of a natural language (http://www.natur.cuni.cz/filosof/markos/Publikace/markos_rozhovor%20Houser%2021Jan.htm).

[32] "The living entities are not made up of a code, but they rather invented the code themselves for their own needs... Information makes sense only if there is someone (or something if you prefer this pronoun) who reads it, who understands it. (…) If you leave your address book on Mars or if you disperse your DNA or DNA of a chimpanzee, nothing happens. This is due to the aforementioned arbitrary registration – the code itself means nothing." (http://www.natur.cuni.cz/filosof/markos/Publikace/markos_rozhovor%20Houser%2021Jan.htm).

[33] See http://www.natur.cuni.cz/filosof/markos/Publikace/markos_rozhovor%20Houser%2021Jan.htm.

The hermeneutic tradition links Anton Markoš with phenomenology and the theory of social construction of reality, which is also based on the assumption that everyday life is imbued with symbolism and linguistically mediated metaphors, presented as objectively real and "naturally existing". According to Berger and Luckmann (1999), symbolism becomes part of everyday life through language as an elementary building block of the common perception of reality. As a result of an accumulation of meanings, experiences and objectification in the semantic and *social supply* of knowledge, the social distribution of knowledge (of what is relevant and what is not) is being formed. Likewise, the modern strategy of the body symbolisation is part of a broader claim on the strength of a "given" boundary between *nature* and *culture*. The construction of these boundaries is not a description of existing differences, but a process of continuous *purification* of hybrid states, people, and objects (Latour in Wade 2002).

Contemporary Biosocieties

Reproductive medicine is an ideal example of a boundary area where the constant negotiation of boundaries can be analysed. Culture or the boundaries of the "social" are constituted through social interpretation embedded in the body, the exploration and transformation of individual cells, sperm, eggs, and stem cells. The defined category of life brings about a whole apparatus of society surveillance, legitimated through biology or genetics and biotechnology, and this leads not only to creating boundaries and definitions, but also to creating nature itself (e.g. in case of synthetic biology.). Therefore, it is not the trivial selfish, altruistic gene or the gene of alcoholism that acts here. Using knowledge, power, and technology, it is society that describes and invents nature, which is, however, subsequently recreated by culture. Simply put: culture becomes natural, and nature becomes culture. Paul Rabinow in *Artificiality and Enlightenment: from Sociobiology to Biosociality* (1996) says: "in the future, the new genetics will cease to be a biological metaphor for modern society, and it will become a circulation network of identity terms and restriction loci, around and through which a truly new type of auto-production will emerge, something I call 'biosociality'. If sociobiology is constructed on the basis of a metaphor of nature, than the biosociality nature will be modelled on culture understood as practice. Nature will be known and remade through technique and it will finally become artificial, just as culture becomes natural. Were such a project to be brought to fruition, it would stand as

the basis for overcoming the nature/culture split (Rabinow 1996: 99)." At the same time, what is or what is not considered a sphere of nature, body or physical existence is a representation of social processes, the interplay of power and knowledge, which embeds certain concepts into the body: such as standards, risks, boundaries between the healthy and the sick, the moral and the immoral, or the acceptable and the unacceptable. In the process of establishing social relationships and social order in society, difference or otherness is interpreted, under certain conditions, as a violation of normality, e.g. a risk to the health of the population, and it is very often backed by specific genetic and biotechnological screenings. The authority of the determined difference among people, however, is always threatened by the presence of hybridity. Homi Bhabha says that hybridity is not an inter-space between competing discourses, but rather an effect of uncertainty affecting the discourse of power (Bhabha 2004: 113). Hybridity contained in cultural forms destabilises the dominant discourses, rewriting hybridised forms of "others", such as ab/normal units in cultural narratives, and therefore it may present culture as a place of conflict and uncertainty. What has to be emphasised is the fact of an incomplete definition of the boundaries between nature and culture, where the image of life is both a symbolic and material space where the boundaries are being created. Modern Western concepts of nature are more adaptable than is generally perceived, mainly because the dividing line between nature and culture is by no means clear; on the contrary, it is a subject of much ambiguity and strategic manipulation. In recent years, moreover, there has been a massive deconstruction of their boundaries and the clearly defined coordinates (Wade 2002; Haraway 1990; Rheinberger 2000; Meloni 2013). For example, biotechnology is loosening the traditional concept of life itself (*bíos*) as something "natural", a sphere of nature. The contemporary experience of the development of new biotechnology, DNA analysis, stem cell research, new reproductive techniques, therapeutic cloning, and their social and cultural consequences revives the issue of *life* to an unprecedented extent, and in an interesting context. Especially in areas such as synthetic biology and epigenetics, the old ideological boundaries between "nature" and "culture" are crossed even at the level of everyday scientific and biomedical practice.

Therefore, DNA as the representation and materialisation of the concept of life itself is a metaphor, a symbol, but also materiality: a metaphor of interpretable text, a symbol of the description and understanding the human or living beings through the body. But how can we analyse the discourse of life – i.e. DNA – in terms of the social sciences? Can DNA, stem cells, artificial cells, and the representations of the body and physical existence

be regarded as both a cultural text and its material expression? And can we curiously follow countless stories used in different types of discourse on how DNA itself "acts"?[34] To understand this problem, social sciences offer a range of concepts, and interpretive and analytical tools. Using these tools, one can grasp, understand, and describe how the phenomenon of mapping the human DNA, the genome, affects society. The most important analytical tools include biopower, biopolitics, governmentality, biosociety or biological/genetic citizenship. Complex societies, including those operating in the contemporary global regimes, are biosocieties, i.e. societies re/producing "life" as a political category. The forms of life, the places of bio-capital production, appeardiffuse, and are established on the historical horizon. Historically, biosociality is situated at places of production and what Michael Fischer, Raymond Williams, Ludwig Wittgenstein a Emmanuel Levinas call "life forms", i.e. the forms of the practice of creating and establishing meanings, naming things in a cultural context. Language games are a relevant part of the life forms. We play various language games (life situations) reflecting various "life forms" (Rajan in Gibbon and Novas 2008; Peregrin 2003). "Sociality" always implies subjectivity. Subjectivity becomes the crucial analytic through which sociality (which sometimes forms and sometimes does not) can be studied. "The biosocial subject" is one whose subjectivity is transformed into sociality, and this transformation constitutes a crucial *political* moment. It is the point at which subjectivity as subjection becomes potentially or actually transformed into subjectivity as sociopolitical "*agency*", where the class, location, gender, post-human identity, nationalism, or bio-ordinates are fundamental coordinates (Rajan in Gibbon and Novas 2008:159).

Biopower/Biopolitics – the "Old" and the "New". *Bíos* and Politics

At the dawn of the modern era of *biopower*, biology is reflected in politics for the first time in history. The fact of health, life, "is no longer the inaccessible foundation that emerges from time to time in the randomness of death and its fatality; it partially enters the field of management control and intervention power" (Foucault 1990: 166). Power/knowledge becomes a

[34] "Consistent hermeneutic thinking shows that people can find an answer to the meaning of their life only when they realise that their life orientation, creating their own *life reality* ("Lebenswirklichkeit"), and finding ways to live is also related to 'stories' they tell about themselves in the form of myths, art works and personal history."(http://www.phil.muni.cz/fil/sbornik/2000/13hroch.html)

factor in the transformation of human life and the population – biopolitics. The point when the human species as a subject appears in the strategic program of politicians may be called the "threshold of modern biology of society". The modern human is becoming an animal in politics which makes her/his life problematic. The biological representation of the human as the body has started to be conceptualised nowadays in terms of factory production and machinery, and social problems have been analysed using symbolic analogies to diseases in a sick body. These biological categories are expanding into moral, social and religious spheres, and biology itself becomes a unifying concept applying also to the social sciences (Weindling 1989).

The two extreme poles of social scientific theoretical concepts of life itself – both the naturalistic concept (life determines policy) and the concept of rational choice theory (political rationality determines life) – fail to explain the obvious instability and fragility of the boundaries between "life" and "politics". It is this instability and ambiguity that motivates many people in the social sciences to use the concept of biopolitics as an analytical tool that does not separate *bíos* from *polis* by boundaries; on the contrary, it elaborates on them and provides space for reflective and imaginative work with them (Lemke 2011; Wade 2002; Gibbon and Novas 2008; Haraway 1990; Rabinow 1996; Gottweis 2005, etc.)[35]. Some of them point out that *life* is not a basis, nor an object of politics. Instead, it represents the boundary of politics – the boundary that should be both respected and crossed, the area which means both the "natural" and the "given", and the "artificial", "changeable" and "created".

One such conceptualisation of forms of the modern strategy of life governance and knowledge distribution necessarily refers primarily to *biopower* and Michel Foucault. According to Foucault, biopower means the influence of *life* and its mechanisms on the interaction of power and knowledge. Life entered politics as the creation of bodies that become discursive objects allowing us to watch the "embodiment" of power and knowledge in the late/modern society. Generally speaking, the phenomenon of human life entered the order of power and knowledge in the field of political techniques. Throughout history, biopower developed on two interconnected poles: when formed, the first of them focused on the body as a machine, the enhancement and improvement of its abilities, the increase of its usefulness and obedience, and its incorporation into the realms of administration and economic control; this created the forms of power that Foucault called *disciplines – the anatomo-politics of the human*

[35] In the Czech context, for example: Slepičková, Šlesingerová and Šmídová (2012).

body. The second form of power over life formed in the mid-18th century, focused on the body as a space, the mechanics of life itself, the basis of biological processes, including fertility, natality, mortality, and health. Their influence can be seen in countless interventions and different ways of *regulatory control*; this is *biopolitics of the population*[36].

"The disciplines of the body and the regulations of the population constituted the two poles around which the organisation of power over life was deployed. The setting up, in the course of the classical age, of this great bipolar technology-anatomic and biological, individualizing and specifying, directed toward the performances of the body, with attention to the processes of life characterised a power whose highest function was perhaps no longer to kill, but to invest life through and through. The old power of death that symbolised sovereign power was now carefully supplanted by the administration of bodies and the calculated management of life. During the classical period, there was a rapid development of various disciplines -universities, secondary schools, barracks, and workshops; there was also the emergence, in the field of political practices and economic observation, of the problems of birth-rate, longevity, public health, housing, and migration. Hence there was an explosion of numerous and diverse techniques for achieving the subjugation of bodies and the control of populations, marking the beginning of an era of biopower" (Foucault 1990:162).

However, what is important in this context is the positive production of power, life, the mode of the body, and sexuality. The interaction of power and knowledge is not only repressive and suppressive, but also regulating, producing and forming the knowledge of bodies, and is represented in the way it is inscribed into the bodies. Then they become a contextual representation of the relations between knowledge, power and truth[37]. Foucault says that biopower becomes the threshold of modernity, when it specifically puts life at the centre of the political order, or more precisely, the political economy of neoliberalism. Social control in the emerging capitalism was not exercised only through ideology or consciousness, but especially through the body and physicality (Foucault 1990; Foucault 2004).

[36] In the Czech context, see Šmídová (2011) or Slepičková (2014).

[37] Knowledge is always a form of power, and power determines when and under what conditions knowledge will be applied. It is more important than the question of "truth" because knowledge associated with power not only assumes the authority of "truth", but also has the power *to create the truth*. Knowledge does not exist without power, it produces it, and power produces knowledge. Discursive formations support certain regimes of truth.The definition of "truth" is real in its real-world applications (Hall 1997).

In modern Western epistemology, we have been able to see the efforts to understand life as a specific analytical category since the early 19th century. Since the second half of the 19th century, the impact of the arising modern biology and the interest in life could be seen in the philosophical works by Friedrich Nietzsche and Henri Bergson, and later in works by Hannah Arendt and others, as the so-called *Lebensphilosophie*.[38]

In practical politics and public discourse in the first half of the 20th century, there was also a massive wave of interest in the themes of life and physicality, represented by the concept of biopolitics, especially in texts regulating and governing life and so-called race hygiene, i.e. mostly in the books and articles by German national socialists and the contemporaneous European discourse of eugenics, supported by the influence of evolutionism and the concept of society as an organism. The discourse on biopolitics reappeared in the 1960s, when a new field of interest in political science started to be established. This theoretical approach was based on the belief that instead of the analysis of political structures and processes, we need to research the biology of behaviour, socio-biological concepts, and evolutionary theories (Lemke 2011).

In this context, Herbert Gottweis distinguishes the "old" and "new" biopolitics (Gottweis 2005)[39] and analyses the transition between the old and new form of power over life with the example of the existence and establishment of biobanks. The new biopolitics is then characterised by decorporalisation, molecularisation and informatisation, micro-steering, politics of biovalue, rhizomic character, and transnational/global orientation. Current patterns of biopower were also summarised by Paul Rabinow and Nikolas Rose in *Biopower Today* (2006) who mention three areas: the idea of race, reproductive medicine, and genomics. In the last ten years, social scientists all over the world have used the term biopower/biopolitics[40] to reflect diverse events, such as the war on terrorism after September 11, 2001, the rise of neoliberalism, biomedical and biotechnological innovations in reproductive medicine, where the most important issues include stem

[38] For details about vitalism, see Monika Greco, *On the Vitality and Vitalism* (2005).

[39] Herbert Gottweis, *Comparing Biobanks: Towards a New Form of Biopolitics?* prepared for the International Comparison of IHTs Workshop, Rome, June 20-21, 2005 (available at http://www.york.ac.uk/res/iht/events/HTAiRome2005/romepresent/Gottweiss.pdf).

[40] In the social sciences, there is a lot of debate about the difference between biopower and biopolitics. Does biopolitics differ from biopower? Is biopower a broader term than biopolitics? Or are the two terms identical,synonyms? In this text, I am rather building on the concept of biopolitics as the second pole of anatomo-politics – an individual discipline, i.e. biopolitics that regulates the population. Recently, however, the term biopolitics has been used as a synonym of biopower, i.e. the politics of creating and regulation self.

cell research, the phenomenon of surrogacy, egg and sperm donation, the project of mapping the human genome, innovation in biomedicine, etc.

Other major comments on the Foucault's concept of biopolitics were made by Thomas Lemke in *Biopolitics and Beyond. On The Reception Of a Vital Foucauldian Notion*[41], where he describes three types of the current trends in critical reading. He points to the fact that

1) Foucault's concept of biopolitics resembles the relation to the idea of integral physicality. His analysis of power techniques that shape and fragment physicality refers to the idea of fixed and identifiable physical boundaries. Today, however, this idea seems more than problematic. It now seems that the body crosses the boundary of the self-conscious organic entity, and becomes the result of technological interventions, as described by Donna Haraway (1991) and Judith Butler (1993). Molecular biology has established a new level of intervention beyond the boundaries of the classic biopolitical poles of the "individual", and of the "population". Control becomes genetic control at the level of cells and molecules both in terms of anatomo-politics (individual DNA analysis) and population control (e.g. population genomics).

2) Biotechnology and new technologies in general disengage and recombine physicality and the category of life itself, and lead to a new relationship between life and death. In *The Birth of the Clinic*, Michel Foucault says that death is an integral part of modern medicine; in other texts, he seems to assume that death marks the outer boundaries and the downside of biopolitics. In contrast to this view, we are witnessing a situation where life and death are intertwined more than Foucault had imagined: there is human bio-material, body parts extending living entities. Even if their "original" carriers are dead, human cells, organs, blood, bone marrow, sperm, eggs, and DNA can exist both in the bodies of other people, and in custody, laboratories, or biobanks, or can be cultivated in stem cells that are inherently immortal (Iacub 2001), etc. As a consequence of these phenomena and options, the definition of death can be used for the prolongation of life – when death can help someone else in transplantation medicine, or in the use of stored sperm, inseminated eggs or frozen embryos.

3) The last part of the criticism relates to Foucault's anthropocentrism when biopolitics and biopower focus only on human beings and the population (despite the proclamation of the death of the human in *Words and Things*). This privileged attitude to mankind does not reflect the influence of the environment on life, including people – therefore, it is necessary

[41] The undated text is available at: http://www.biopolitica.cl/docs/Biopolitics_and_beyond.pdf.

to focus not only on human life, but also on life in general (Rutherford in Lemke 2011). In addition, a new way of thinking about bodies as texts did not solve the epistemological and normative boundary between the human and non-human, described by Bruno Latour (Latour 1993). In particular, the theory of post-humanism is based on the assumption that the category of the vital should not be limited to mankind and the human species (Hayles 1999; Waldby 2000; Kac 2007; Haraway 2008). For example, Donna Haraway reflects the development of biomedical technology and gene diagnosis, and asks questions about the nature and boundaries of the human body and its relationships to personality and identity, using the classical metaphor of cyborg. The body and its cells, the bio-objects, thus become an important concept and materiality: in contemporary culture they serve as examples of the consequences of major changes in medical practice and medical technology, and the changing boundaries and structures of illnesses and diseases. The changes in the demographic structure of society, life expectancy, and gender issues are part of a broader framework of social change, including issues such as artificial insemination, new reproductive technologies, the global trade in organ transplants, and the development of cybernetics, microsurgery, or developments in pharmacology. A large part of the social theory of the body examines the impact of scientific changes associated with issues of legality, the concept of personality, identity, and individualism. The connection between life and technology seems to be constituted and demonstrated also through the relationship to information; in this regard, the cybernetic and genetic concepts of information overlap. The reduction of life to genes and genetic information, inheritance, is often conceptualised in terms of communication, and control. But information is not just a metaphor that reduces the complexity of life to an object of biological knowledge; it is also a series of technical-economic practices. Towards the end of the 20th century, described as mythical times by Haraway, we were all chimeras, theorised and fabricated hybrids of machine and organism; in short, we were cyborgs. The myth of the cyborg[42] is a condensed idea of imagination and reality. Production, reproduction, and imagination are the battlefield. Donna Haraway's text wants to espouse *joy* from muddying the boundaries and to highlight *responsibility* when creating them. She uses the metaphor of cyborg as fiction mapping the current social and physical

[42] "My myth of cyborg is about crossing the boundaries, about powerful connections and dangerous possibilities that can be explored by progressive people as part of the necessary political work. One of my premises is that most American socialists and feminists see the deepening of the dualism of the mind and the body, the animal and the machine, idealism and materialism in social practices, symbolic formulations and physical artefacts associated with high technology and scientific culture..." (Haraway 2002: 55–56).

reality, an imaginative resource offering some very fruitful connections. In the last two centuries, biology and evolutionary theory have simultaneously shaped modern organisms as objects of knowledge, reducing the dividing line between humans and animals to a mere residual trace that arises in ideological battles or professional skirmishes between the natural and social sciences. "Late twentieth century machines have rendered thoroughly ambiguous the difference between natural and artificial, mind and body. … Our machines are disturbingly lively, and we ourselves frighteningly inert… In short, the certainty of what counts as nature – a source of insight and promise of innocence – has been undermined, probably fatally. The transcendent authorisation of interpretation is lost …" (Haraway 2000: 293–294).

Biopower, Governmentality and Enhancement

> *"Described the artificial maternal circulation installed in every bottle at Metre 112; showed them the reservoir of blood-surrogate, the centrifugal pump that kept the liquid moving over the placenta and drove it through the synthetic lung and waste product filter… Showed them the simple mechanism by means of which, during the last two metres out of every eight, all the embryos were simultaneously shaken into familiarity with movement… Which brings us at last," continued Mr. Foster, "out of the realm of mere slavish imitation of nature into the much more interesting world of human invention."*
>
> *Aldous Huxley (Brave New World)*

Besides biopower as a specific form of power over life in the modern era, there is also the type of power which Michel Foucault called governmentality. Governance, and control of the population as the art of governance is characterised by the fact that the power of the de-personalised sovereign – the state – is transferred to individuals through experts, rationalised discourse, and governance techniques. Power is decentralised and circulates, not only from a specific source: the monarch, the State, the ruling class. It is like an organisation network, operating everywhere, even in the most intimate matters; and it is not always negative, but also an effective, productive network circulating throughout the body, producing the social discourse of modern, national bodies. The point is to show

how dispositions of power are implemented by affecting the body/bodies, and how the modern technologies of power, using life as their target, are developed. It is necessary to examine not the "history of mentalities" that are aware of the bodies only by perceiving them and giving them a meaning and value, but the "history of bodies", and how most material and life itself is embedded into them (Foucault 2004: 176). In his lectures about "the birth of biopolitics", focusing on the genealogy of the modern state, Michel Foucault developed the concept of "governmentality", a form of governance as a basic concept for the analysis of exercising power/governance, from antiquity to the present. He stresses two points. *Firstly,* he mentions the mutual solidarity among the techniques of power and forms of knowledge. The connection of the concepts of governance and mentality suggests that it is not possible to understand the technology of power without analysing the forms of political rationality supporting it. It is a specific form of *representation* where governmentality defines the discursive field where applied power is "rationalised". The mechanisms of rationalisation are ways of naming problems and providing arguments or various justifications, or solutions/dealing with the problem. On the other hand, governmentality also structures specific forms of *intervention*.

For political rationality, there is no clean, neutral knowledge that simply "re-presents" the reality of governance; this rationality also produces the intellectual tools for the processing of reality, which later become part of the technology of politics. This process includes meetings, procedures, institutions, or the legal forms that allow for the governance of objects and subjects of political rationality. *Secondly*, the concept of governance can also be used in a more general sense, suggesting a close connection between the power and subjectivisation processes, because the idea of governance does not have only political significance. Foucault also names the process of self-control, guidance/advice to families and children, household organisation, or spiritual direction. For this reason, he defines governance as leadership, the "management/leadership behaviour", a term that ranges from "governing myself" to "governing others", focusing specifically on neoliberalism and the forms of governance influenced by it[43] (Foucault 2004; Lemke 2001; Dean 2010).

Biopolitical governance also and mainly manifests itself through the articulation of danger. Risk/danger is the basic metaphor and symbolisation of the necessity and need to govern. For example, modern knowledge/representation of health/illness, life in the context of politics, specify the

[43] Specifically, the German post-war neoliberalism and the difference between the Freiburg and Frankfurt Schools and the Chicago neoliberalism.

ideal of social health, analogical to physical health, which can express also a call for the elimination of risks, treatment of the society, or a new political order (Sontag 1997)[44]. The medical historian Paul Weindling offers an interesting theory that enables us to trace the common traits between the 19th-century bacteriological studies and authoritative political rhetoric. According to Weindling, these bacteriological researches offered attractive alternatives to the political complexities of social reform. Bacteriological science as a means of overcoming the social suffering of an industrial and urban society has become a technocratic strategy. Robert Koch's theory of micro-organisms postulated that every disease has a specific cause in a pathogenic micro-organism, and such a pathogenic organism can be isolated. Thus, Koch located the causes of the disease. The metaphor of the bacteriological, scientific perception of a disease could be and in many cases was accompanied by authoritarian, political overtones (Weindling 1989)[45]. In 1984[46], Bruno Latour published his work on the Pasteurisation of France and described this process as a growing chain of translations. He says: "On one side – France; on the other side – those who made microbes visible, in the middle – hygienists who translated the data from laboratories…" (Latour 1988:56)[47].

The instrumentally rational grasp of life can be seen not only in the wave of Pasteurisation in the 19th century when microbes were made visible, but it is also apparent in the present politics of hormonal contraceptives, prenatal therapy of embryos, or gene therapy. Since the

[44] During the 19th century, the metaphors of disease in Western society were gradually becoming more aggressive, more demagogic… [The disease] becomes a synonym of everything "unnatural" in this period. To compare a political event or situation to a disease automatically means to blame someone, to penalise someone (Sontag 1997).

[45] The bacterial transmission of diseases became a great modern discovery of the 19th century. It has changed our lives to such an extent that it is difficult to think about the impure without the context of pathogenicity. The impurity, perceived primarily as physical impurity, is a secondary product of the systematic organisation, and classification and some concepts of pollution are used as an analogy to express a general view of the social order. Thus, the modern Western idea of unhealthy impurity is perceived and determined through our knowledge of pathogenic organisms (Douglas 1966). A metaphorical ideal of purity cannot be embedded into anything, into any matter. It depends on how people attribute the value of a certain physical experience, which then seems to be more important than a common experience. "The difference between purity and impurity has been perfectly rationalised by the modern human. This process has been completed by chemist and hygienists..."(Bachelard 1997:159).

[46] 1988, in English: Latour, Bruno. 1988. *The Pasteurisation of France*. MA: Harvard University Press.

[47] According to Latour, contemporary understanding of sequencing the human genome depends on a similar chain of translations.

mid-20th century, biomedicine and biotechnology entered the molecular age, after the 1990s, the age of genomics. The sovereignty, discipline, and the rational governance of the population is exercised in the everyday biotechnological practice and in the management of various ideas about risk, risk of abnormalities, or the desire and need to enhance the bio-value and bio-capital ourselves and our children. The authority, belief in expert knowledge and the instrumentally exercised governance takes over one of the functions of the ancient sovereign – pastoral power – and uses it to watch the state/herd, while streamlining and optimizing the enhancement of the population (Kerr and Cunningham–Burley 2000). This is also supported by the objectification of the vital: "the extreme difficulty in dealing with very complex biological interactions leads to the simplified treatment of life processes as quantified data that exhibit statistical patterns. In turn, this can lead to an objectification of life and a disregard for the subjects and their rights. In reaction, citizens worldwide express their concerns about biopiracy, gene patenting, and genetic discrimination by insurance companies and employers" (Kac 2007: 14).

CHAPTER FOUR

Embryo and Stem Cells Manipulation – Czech Context. Bio-objects and Their Borderlines

Eva Šlesingerová

In the Czech documentary film *Umění oplodnění*[48] (*The Art of Fertilisation*), which introduces the topic of assisted reproduction from different perspectives and viewpoints, we could hear the following sentences about the miracle of conception and the scientific skills and abilities that enable this miracle to happen when the body is not working as it should: "*When you realize how extremely sensitive the fascinating process of creating a new human is, one word comes to your mind: a miracle. So many factors have to work at once that it seems impossible. …Scientists… today can repair the broken life cycle to make it work.*" "Miracle", however, is a word or concept that does not belong in modern rational science, and seems to be its exact opposite. *On the one hand*, the entire film is limited by the modern notion of science as detached expertise – as a miraculous, yet mechanical and rational mending of dysfunctional bodies. "*Science can finish what is naturally comical and actually incorrect*," we hear in the film. Human reproduction is also presented as something that can be described and interpreted only by experts. An expert position is associated mainly with the perspectives of biology, embryology and biomedicine, and the law. *On the other hand*, the film presents the fact that science can actively participate in the process of reproduction as something mysterious, intangible, magical, and... miraculous. Thus, the documentary itself strongly confirms both essentialism and the mythological position of science itself. Leaving aside this particular film, it seems that in the context of current developments in new biotechnologies, people think about their miraculous nature and their ability to exceed the boundaries of the impossible more and more often – sometimes with admiration, sometimes with concern, most frequently with both.

In contemporary reproductive and regenerative medicine, there have been no distinct or insurmountable boundaries between various contexts

[48] Piranha films, available at: http://tvmedicina.cz/vyhledavani/105-umeni-oplodneni-1-prekazky-prirozeneho-poceti. The website of the Czech state TV station *Česká televize* described it as follows: "This cycle with an erudite commentary of top scientists from around the world shows us an almost magical journey to the fulfilment of the greatest human desire – the birth of your own child."

in most recent modern thought. The reflection concerns overcoming the boundaries between technology and culture, the living and the artificial, the human and cybernetic, etc., the boundaries between science as a consistent, externally untapped type of knowledge and other forms of knowledge, based on experience, faith, irrationality, artistic imagination, and philosophy. The development and application of new biotechnologies have also proved yet again the known fact that science itself does not and cannot operate in a vacuum without external influences, value judgements or irrationality (Haraway 1990, 1991; Latour and Woolgar 1986; Franklin 1995). In addition to scientific facts influenced by a particular social environment, science also brings emotions, hope, fear, and desire. Technological possibilities in contemporary biomedicine evoke various ideas and they are described with various words in various contexts, such as hope (Ventruba[49]), revolution and risk (Beck), a deep social cultural change (Vermeulen, Tamminen, Webster 2013), as well as a threat to human nature (Habermas 2003), etc. It is interesting how many materials and texts and how much data compare the current situation of assisted reproduction to or describe it as something miraculous, astonishing and admirable, yet threatening and disturbing. Most of the comparisons refer both to the ethos of modern science, which overcomes nature and the limited possibilities of the human body, and the biotechnological revolution. The revolution had already been mentioned in the 1980s by Ulrich Beck in his *Risk Society* where he described reproductive medicine as the flagship of the social changes we were currently experiencing. In terms of technology and culture, this deep social and cultural transformation is characterized, among other things, by the description of the human genome, the DNA structure, the IVF method, the phenomenon of test-tube babies, preimplantation genetic diagnosis, and the issue of designer babies and synthetic biology. This means the acceleration of new technologies in assisted reproduction and, in recent years, a massive development of biotechnology in general. The technologies, their invention and their role in society are also characteristic features of emerging or already functioning biosocieties, as mentioned by Paul Rabinow (1996), i.e. societies characterized by the fact that their essence is modelled on culture understood as practice. Nature is understood and remade through technique and becomes artificial, just as culture becomes natural. Were such a project to be brought to fruition, it would stand as the basis for overcoming the nature/culture split (Rabinow 1996: 99).[50]

[49] http://www.tribune.cz/clanek/19504 (visited on 30.11. 2014)

[50] "There already are, for example, neurofibromatosis groups whose members meet to share their experiences, lobby for their disease, educate their children, redo their home environment,

In the Czech Republic, the first "test-tube baby" was born at Obilní trh, Brno, in 1982. Since then, local possibilities of reproductive medicine have expanded, and the Czech Republic has become a country that combines a high technological level with relatively great openness and liberal legislative regulation of assisted reproduction and regenerative medicine. It is usual and common to use pre-implantation genetic diagnosis, treatment with stem cells, frozen embryos (embryo cryopreservation), etc. At present, the Czech Republic has around 31 IVF centres and a relatively large number of fertility centres, clinics, and university departments that can explore human stem cells and embryos, carry out sophisticated genetic analyses and screenings, and create banks of biological material and tissue in general. A new branch of medicine – regenerative medicine – is also developing hand in hand with infertility treatment in special centres, including the National Cell and Tissue Centre[51], the Centre for Regenerative Medicine in Prague, and the newly opened PrimeCell Therapeutics centre in Ostrava. Increasingly apparent is an emphasis on cooperation between cutting-edge science and business,[52] not only in treating infertility human stem cells and tissue, etc., but also in treating ageing, and standard diseases and the prolongation of life, by using biotechnology working with living tissue, cells, and genes, originally produced as by-products of the IVF method. In recent years, the technological possibilities of biomedicine have intensively grown, and have reached the very limits of the imagination. However, this development in the Czech Republic has not been accompanied either by an equally intense public debate or flexible modification of legal norms, or by changes in the curricula of medical schools, or by reflection in the public sphere, etc. The hi-tech and cutting-edge environment of the latest technologies does not go hand in hand with legal and social reflection and knowledgeable political

and so on. That is what I mean by bio-sociality. I am not discussing some hypothetical gene for aggression or altruism. Rather, it is not hard to imagine groups formed around the chromosome 17, locus 16, 256, site 654, 376 allele variant with a guanine substitution. Such groups will have medical specialists, laboratories, narratives, tradition, and a heavy panoply of pastoral keepers to help them experience, share, intervene, and 'understand' their fate (ibid: 102)" (Rabinow 1996: 99).

[51] http://www.natic.cz/, http://www.bunecnaterapie.cz/bunecna-terapie/regenerativni-medicina/ (visited on 30. 11. 2014)

[52] Recently (2014), Czech oligarchs have been buying reproductive clinics and centres. For example, Andrej Babiš makes these acquisitions using the Future life company, hoping for development also in the Slovak Republic, Poland, and Austria. We could also mention the acquisitions made by Petr Kellner and the PPF company with the intent to buy Agel, a Czech private hospital network.

debate[53]. This may be due both to post-communist everyday reality, with its weak civil society, and the advancing economization and commodification of human reproduction and regeneration, where sex cells and human tissue are part of the free market. There is little interest in critical thinking and questioning of bio-ethical issues or in the issues relating to the economization of human tissue and cells, or of life in general.[54]

The next part of the book is one of the outputs of the project team, which dealt with the Czech reproductive medicine in three areas – a) obstetrics, b) infertility treatment IVF, and c) embryo manipulation and representation of DNA. This part of the book looks into the topic of naming, defining and manipulating the so-called bio-objects (Vermeulen, Tamminen, Webster 2013), i.e. human genes, stem cells, embryos, foetuses, etc. The default interpretive and analytical framework in this chapter is the concept of bio-objects, the bio-objectification process concerning the reflection of the life boundaries in specific cases of the manipulation with stem cells, embryos, synthetically created cells, and transgenically modified organisms, etc. An important analytical tool is the so-called boundary work (Gieryn 1983, 1999) where I will focus on the issue of scientific representation and intervention, the hegemony of scientific knowledge. In the Czech Republic, this type of knowledge has an exclusive position in defining, manipulating and governing bio-objects, which are also border entities operating in various intermediate states and spaces.

Entering the Research Field

This research was carried out in 2011–2014 and found reproductive medicine in the Czech Republic in a situation of ongoing transformation of healthcare, in transition from the state system to a semiprivate one. Life sciences, such as embryology, genetics, molecular biology, etc., where cooperation is a necessary pre-condition of contemporary biomedicine, have also undergone great development. The development of technologies and hi-tech systems that is gradually being commercialized is also ongoing. The following text is part of the aforementioned team research dealing with reproductive medicine, and addresses the manipulation of embryos and DNA, social representations of genetics, stem cells, and issues of defining

[53] With the exception of debates about the so-called natural births and their technologisation, or therapeutic abortions of severely affected foetuses (in 2013).

[54] Except bioethics, mostly based on the Catholic context in the Czech Republic.

and manipulating these bio-objects. The 18 research interviews[55] were conducted in various environments in 2012–2014: at two clinics, a college, a research centre, two IVF centres, three home environments, and three cafés. In addition to the interviews, the research and analytical work also included other data, e.g. legal documents, website texts, observations of the situation at IVF clinics in interviews and fieldwork notes, popular texts, texts on Internet forums, documents, exhibitions, artwork (bioart a sciart), etc.

For this particular text, I have chosen the following material/data: interviews with 10 communication partners (two geneticists, two embryologists, two doctors, two IVF centre clients, a nurse and a bio-statistician). The interviewees were between 32 and 71 years of age, highly educated (university degrees) and representative of the middle-class urban group, so they are not "representative" of a wider scientific or patient's community. The data also included field notes, laws affecting reproductive medicine and manipulating embryos, popular texts, newspaper articles, and documents (e.g. the aforementioned film documentary). Overall, the research is based on the perspective of ethnography or multi-sited ethnography (Hammersley and Atkinson 2007; Marcus 1995; Falzon 2012) and it is a bricolage analysis of different contexts, places, relationships, texts and field notes, dealing with one problem. Apart from the many issues that have arisen during the research, this chapter thematically focuses on defining and manipulating the so-called bio-objects in different contexts, and thinking about the nature of the research field (science and boundary work)[56].

The main analytical question this particular chapter is focused on is: **How are the boundaries of bio-objects negotiated and defined in the Czech Republic and what is the character of the research field examining the processes of bio-objectification?**

In this context, the text builds on the major issues raised by our joint project team: we assume that within the framework of bio-society (Rabinow 1996) the embryo becomes a borderline object, a part of two differing worlds at the same time: on the one hand, the object of argument over moral values and their setting into norms, and on the other hand the subject of a scientific description of the world and humanity's place in it (Williams, Wainwright, Ehrich, Michael 2008; Mulkay 1997). All this within

[55] 5 geneticists, 3 embryologists, 3 doctors, 2 technicians, 1 nurse, 1 bio-statistician, and 3 IVF programme clients.

[56] http://www.jstor.org/discover/10.2307/2095325?uid=2129&uid=2&uid=70&uid=4&sid=21105323211953

the context of research on stem cells, where the human embryo/bunch of cells finds itself on the frontier of thought on the definition of humanity and the idea of an embryo as "just" a bunch of cells; it is the object of scientific study and at the same time an object of morals and ethics (ibid.). This very example of the argument about the social, clinical, biological, and moral status of the embryo demonstrates the interrelationship between the terms *man*, the *human body*, *health*, and *illness* in modern biomedicine. At the same time, this discussion raises dilemmas which affect the definition of the human embryo and the way we manipulate it.

The Nature of the Research Field

The nature of the research field reflects the interest in the analysis of dealing with the category of life itself, the so-called bio-objects, and reflection on it is an important part of research. The social field is mainly the discourse of life sciences. In recent times, the role of science and particularly life sciences in defining and governing life is crucial and is directly linked to the role of trust in expert systems, in the experts themselves and expert knowledge in general. And it is the very ambiguity and erosion of trust that is at stake. Today, scientific knowledge structures all areas of social life. Scientific knowledge is one of the privileged perspectives describing the beginning of life, defining what are and what are not normal foetuses, healthy stem cells, and nonpathological genomes. My analysis and fieldwork relied on the anthropological perspective which sees science as a specific culture, a cultural and social space. Sarah Franklin in *Science and Culture, Cultures of Science* writes about the unique role of anthropology, which "is a science and has the tools to understand science as a form of culture" (Franklin 1995: 165). Sarah Franklin responds to the classical theory of "two cultures" (Snow 1959), the two competing worlds between natural and social sciences. Geertz describes this as a contrast between „an experimental science in search of rules" and an „interpretive one in search of meaning" (Geertz 1973). Anthropology allows us to overcome this dichotomy: like every science, it is reflective not only of the subject of its research, but also of the research tools and methods and their social and cultural background (Franklin 1995). From an anthropological point of view, the effort to analyse and critically reflect science and the social implications of scientific applications in the form of a fundamental belief system in today's society can make scientists feel threatened. This sense of threat then suggests the extent to which science is an important source

of our fundamental cultural values. Science is defended so vehemently because it is a cultural phenomenon, not because it operates outside the culture (Franklin 1995)[57]. My research also analyses the boundary work of science and how science gets rhetorically constructed as a cultural space in the public contest for credibility and wars over representational legitimacy (Gieryn 1999).

In the Czech context, there is still a hierarchy of expert knowledge with the sciences on the one hand and the humanities on the other. During the research, my communication partners several times referred to this hierarchy of the sciences, albeit either unconsciously; or they directly and habitually laboured under it, without consciously reflecting on their attitude. For example, when being asked for an interview, one doctor told me:

> *I find it fascinating what can be researched – or I rather cannot see the point of the money and time spent on such issues. But yes, we can talk …* (Doctor/embryologist IVF centre in a hospital)[58]

In the research, this hierarchy of knowledge, the "war of the two cultures" (i.e. mainly the difference between genetics and medicine, and sociology and anthropology), resulted in various shades of scale, from overt contempt for and underestimation of sociology or anthropology, and telling smiles referring to condescending pity or – on the other hand – to conspiratorial "fingers crossed" in the fight "against the system" of "the technocratic and impersonal" science. Some communication partners were also aware of the importance of the involvement of the social sciences especially in ethics or the reflection on the economization of reproductive and regenerative medicine. Most of them were very polite, pleasant, and very sophisticated. They often felt that their manifested superiority was something natural and unquestionable, part of the inherent order of things. "That is the way it is." There was also an apparent hierarchy or ambiguous position of power

[57] Rayna Rapp, Emily Martin, and Sarah Franklin, who proposed new anthropological models of culture, knowledge, ethnography, and fieldwork (Franklin 1995; Martin 1991; Rapp 2000), dealt with this topic in the particular context of reproductive medicine and biotechnology in medicine.

[58] Interview quotations used in the empirical chapters of this book refer to different aspects and characteristics of the communication partners in their notes on informants. The specific information provided is derived from the particular research focus of each chapter and its author's manner of treating the relevant personal information for the research record. Thus, sometimes the reference to profession is adequate and sufficient, it is reference to age or sex category in other cases, or the type of organisation the research participant works in for the others. Some chapters recurrently refer to different sections of the same interview, in that case nicknames of the communication partners are mentioned for easier cross-reference.

among life scientists themselves and, for example, medical doctors. A few scientists from a Czech research centre told me that doctors do not have very good education here and do not actually understand the real science, but then I was surprised to find out that some of them are actually afraid of doctors. A geneticist once said:

> *Everyone is afraid of the doctor here; we have to set things up to please her.* (Geneticist/biologist, science lab)

Likewise, some communication partners mentioned the need for translation or interpretation of the contexts that are "beyond" science and its application and popularisation, of scientific knowledge, the interpretations of scientific facts, and the information between the "real science" and medicine, and the public. One of the communication partners, a bio-statistician, actually defined her work as "translating" the language of statistics into a language understood by doctors.

> *The important things are: genes translated into figures + intuition. Some doctors have good scientific thinking, and intuitive, exact thinking can also be found among doctors… and geneticists because they are more into science than into clinical medicine, so they get it and the co-operation with them is perfect. Unlike gynaecologists, who find it difficult to work with figures… One woman was a categorically clinical doctor. I had to act as a mediator between the two groups of doctors. … To be a good bio-statistician, I have to understand not only the figures, but also the medical basis to be able to help them interpret the results they get... Figures can be produced by a statistical program. But my role is to help them interpret and find more related things, so I have to absorb the biological background of the problem. I'm a sort of mediator, a translator. I can help translate the biological stuff into figures and then translate the figures into reality. One needs imagination.* (Bio-statistician, science institute and medical school)

Irrespective of gender, age or status, the experts, doctors and scientists assumed they had an absolutely indisputable right to represent the emergence of life in scientific terms, but they were less certain about the boundaries of life itself, and the words, the language, that should be used. IVF clients also mentioned the role of mediation and clarity. They described the dehumanisation and their inability to understand the scientific language of the whole process of assisted reproduction as one of the handicaps of the

programme[59]. This suggests a more general question of how to speak about and popularise science and how to make it accessible. The issue of cultural translation and interpretation, as well as the question of representation and translation of sciences such as genetics, is mentioned in a number of anthropological works using analysis as a fundamental methodological background (see e.g. Rabinow in Clifford, Marcus 1986; resp. van Dijck 1998). The interpretation and popularisation of science, however, is a specific process of building cognitive structures in public discourse. José van Dijck in *Imagenation* (1998) shows that we cannot make the assumption that to popularise science means to present it to the public, the lay people, i.e. those who should accept and understand its accessible form in an enlightened way. To popularize science does not mean that the main objective of all the actors involved (scientists, their opponents, journalists, politicians, lawyers, government regulations, social norms, ethical taboos, etc.) is to find a consensus, the greatest acceptance of the facts presented. This may result in an ironic vision of a brilliant scientist who teaches and enlightens the ignorant audience, the public and the lay people. It is more important to negotiate and translate the facts than to present and accept them. From the perspective of the social sciences, the assumption that the "social" is present also in the development of technologies and laboratory research and that the process of producing facts includes scientists, as well as other actors, tools and literature, seems to be the most acceptable. Therefore, science is both the process of producing facts and the process of offering ideas (Latour in van Dijck 1998; Woolgar 1986; Latour 1993). The "mediation" of science is the concatenation of the interactions and alliances between groups of professionals and lay people – clients or patients who do not reproduce or manipulate expert knowledge, but are (or should be) active participants in the dissemination of science into the public arena. It is a process of professional pocket stealing of ideas and thoughts, recruiting alliances, and negotiating boundaries (van Dijck 1998, Šlesingerová 2013).

Bio-objects in the Czech Republic. Manipulation, Defining, Boundary Work

For this research, it was absolutely crucial not only to think about the category of life itself and its political and social grip (biopolitics), but also

[59] They also mentioned the uncertainty of the outcome, physical and psychological pain, feeling that the body is a thing, goods, etc.

to reflect on the nature of exploring the social life of the so-called bio-objects, i.e. human tissue, stem cells, DNA, embryos, etc. For example, the process of objectification of living tissue is also reflected in new forms of biopolitics, characterized by molecularisation, dehumanisation, and a rhizomic character (Gottweis 2005). This particular part of the research involved the analysis of dealing with bio-objects as cell-specific entities produced on the way from conception to birth in the IVF process. In recent years, these entities could be produced only in IVF. Stem cells, for example, could be extracted from human tissue, e.g. connective tissue cells or bone marrow, etc. in adult humans. Other entities, such as artificial biological organisms (via synthetic biology) used for therapeutic purposes, are also produced. In the Czech Republic, the management of these entities is monitored by several public and private institutions, e.g. the National Register of Reproductive Health at the Institute of Health Information and Statistics of the Czech Republic/ÚZIS (for assisted reproduction), etc. The modes of representation, archiving, manipulating, naming, and defining are governed by laws and regulations, such as Regulation No. 227/2006 Coll. *Act on research on human embryonic stem cells and related activities and amending certain related acts*[60]. In the European context, the Czech law is one of the more liberal ones.[61] The law, for example, allows the cell donors to agree or disagree with utilising the "surplus embryos produced by in vitro fertilisation for the purposes of assisted reproduction that have not been used for this purpose." It also regulates the technological processes, e.g. intracytoplasmic sperm injection – ICSI, cryopreservation of embryos, oocytes, PGD preimplantation diagnosis, etc.

Stem cells, embryos and tissue – in certain circumstances, all these entities can be called bio-objects – technologies and manipulation of them and production processes can be then called the bio-processes of objectification. What does it mean? Conceptually, my research is a follow-

[60] There are also other laws, such as: Act no. 372/2011 Coll., On health services and terms (Health Services Act); Act no. 373/2011 Coll., On specific health services; Decree no. 116/2012 Coll., On the transfer of data to the National Health Information System; Act no. 227/2006 Coll., On research on human embryonic cells and related activities and amending certain related acts; Act no. 101/2000 Coll., On the protection of personal data and amending certain laws, as amended regulations; Act no. 296/2008 Coll., On ensuring the quality and safety of human tissue and cells intended for human use and amending related laws.
For other legal aspects see Miroslava Sedláčková: Legal and ethical aspects of assisted reproduction: available at: http://is.muni.cz/th/77051/pravf_r/Rigorozni_prace_AR_2.pdf

[61] *I am glad that the Czech legislation offers broad application possibilities for assisted reproduction on a European scale and does not create obstacles to further research of reproductive medicine.* (senior consultant Milan Mrázek, M.D., Ph.D., MBA, head doctor of the Centre of Assisted Reproduction IVF ISCARE) (http://www.tribune.cz/clanek/19504).

up to the project *Bio-objects and their boundaries: governing matters at the intersection of society, politics, and science*[62], aiming to describe various dimensions of producing and manipulating the so-called bio-objects and processes of their objectification. According to Andrew Webster, „bio-objects play a crucial role in the 21st century when expanding the knowledge of life and its components is fundamentally transforming what life means and where its boundaries lie" (Webster 2012:1). Andrew Webster and others suggest a conceptual bio-object tool to describe and understand the socio-technical phenomena in situations where the understanding of the category of life itself is shifting, and the process of objectification is also a process of becoming vital not in the sense of alienation, but materialisation. The issue of the conceptualisation of these phenomena has largely become a question of the boundaries, the boundaries between the animate and inanimate, the animal and human, the organic and inorganic. These limits are also unstable, changeable, and so interconnected, that they exclude any claim to the definitive nature of the list of bio-objects confined to the show window of life sciences. Their essential nature itself is a chimera, an illusion. Therefore, sociologists suggest analysing rather the *processes* of bio-objectification, i.e. how various manifestations of life are created and given life or multiple lives. For example, an aborted foetus tissue can serve as a source for re-vitalised stem cells. Life itself is dealt with primarily by life sciences (as mentioned in the previous text), all the more because life has become totally manageable on a molecular and genetic level. This often causes essentialisation, and that is why the team of scientists from the COST project "Bio-objects and their bounadries" deals with the processes of objectification – the materialisation of life itself into objects – to avoid the reduction that sees life itself only as cells, genes, etc.

In the Czech Republic, dealing with human tissue is governed by the laws that define the legal matter, but do not regulate its manipulation so strictly[63]. According to the European Parliament materials, the so-called reproductive cloning, unlike therapeutic cloning, is prohibited throughout

[62] European Commission COST Grant Program project: http://www.cost.eu/COST_Actions/isch/Actions/IS1001.

[63] Regarding the different legislation in the EU countries, Ireland, for example, prohibits any research or manipulation with embryos; in Austria, the embryo is not defined as such, the fertilized egg is described using the term "cells capable of developing", legal regulation strictly limits the research on human embryos, and the donation of embryos or gametes is expressly prohibited. Germany has the most restrictive law banning embryo research, cloning in any form, production of hybrids or phantoms, and the modification of germ cells as in Italy. The Finnish legislation defines the embryo as a living group of cells resulting from fertilisation and capable of further development; research may be conducted only in institutions where permission has been granted, and the use of embryos is limited for 14 days. Sweden and

Europe[64]. However, compared to that of many other European countries, Czech legislation is liberal, and such research may be conducted on embryos younger than 14 days. The Czech Republic is also one of the countries that have ratified the 2001 Convention on Human Rights and Biomedicine of 1998 and the Appendix Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (96/2001 Sb)[65]. But a statutory regulation is one thing, and the real practice in IVF and fertility centres another. For example, the Czech Republic has a law prohibiting sex selection. Selecting sex at the cellular level is prohibited and illegal and can only take place under exceptional circumstances, justified on health grounds (hereditary disease in the male or female line, etc.). However, it is part of the client service that "helps" even the couples that have no medical reasons for sex selection. One of the clients (a woman) said:

> *There was a questionnaire, an interview asking if I had children. I wanted a girl, and the doctor said: Don't worry, it can be arranged, don't worry, it can be arranged. You can pick the embryos with the sex category you want – that's what I understood… I knew how many embryos there were (5 or 6) and I knew their sex (two girls and three boys)… During the process, you can manipulate things… I don't know how many viable embryos they use. You do have some wiggle room in the process… PGD testing also took place, and this is when they determine sex.* (IVF client, scientist)

As in many European countries, dealing with bio-objects in the Czech Republic is also characterized by certain commodification. An IVF patient said: *I felt like in a shop with babies…* The IVF and ART processes and regenerative medicine technologies are a very attractive part of the economization of biomedicine, the market with eggs, sperm, conception services, PGD testing, etc.

An important aspect of dealing with bio-objects is their displacement "out of the body", their functioning in an in-between situation in the sense mentioned by Herbert Gottweis who describes the disembodiment

Greece have a similar, more liberal approach. Denmark, Luxembourg, Italy, Ireland, Germany and other countries have taken the opposite perspective (EU legislative).

[64] Therapeutic cloning is the cultivation of surrogate cells and tissue to heal the actual body, e.g. for Parkinson's or Alzheimer's disease. In Germany and Austria, it is prohibited. The situation changed after a way to obtain stem cells from adult cells was discovered.

[65] Commentary: http://bioetika.ktf.cuni.cz/articles.php?lng=cz&pg=29

of objects of contemporary forms of biopolitics/biopower in the form of human tissue and cells "living" outside the body or transplanted into the bodies of other people. Betina Bock von Wülfingen in *From re-pair and re-production to (re)generation: bio-objects as indicators of cultural change*[66] *defines bio-objects as displaced living* tissue on the border between the animate and inanimate, the organic and inorganic, the human and animalistic, etc. By being manipulated "out of place" (Bock von Wülfingen 2012) they are objectified and displaced. Czech statutory legislation mentions the production and functioning of stem cells or embryos "out of the body"[67] and sees it as their important feature.

Producing, manipulating and defining the so-called bio-objects suggests a fundamental social and cultural change, a new paradigm. The authors in the project on bio-objectification propose three analytical sections to access this topic: a) boundaries, b) governance, and c) new social, economic and political relations. For this chapter, I have chosen the issue of boundaries. The concept of bio-objects also suggests the unsustainability of keeping dualistic categories and the importance of the so-called conscious reflection of boundary work in the analysis and interpretation of the social implications of scientific work. As Gieryn says, "science is no single thing: its boundaries are drawn and redrawn in flexible, historically changing and sometimes ambiguous ways" (Gieryn 1983: 781). Taxonomies include: epistemic assemblages, classifying procedures, work on the classification, standardisation – not only "sorting out" of life forms (such as race, skin colour, etc.), character, and a moral dimension and hierarchy of life itself (Vermeulen, Tamminen and Webster 2013). Andrew Webster and Nik Brown in *New Medical Technologies and Society/Reordering Life* (Brown and Webster 2004) write about social changes that bring about new medical technologies and deal with boundary work, defining life itself. Inspired by Mary Douglas, they mention the issue of hybridisation as a production of order creation and refining the boundaries whose purification is a necessary condition for the creation of the cognitive map, the symbolic order.

Bio-objects can exist at various boundaries, in liminal spaces, e.g.:

a) Between the human/nonhuman, at the boundaries of humanity, between the subject and object, in the process of objectification;

b) Between science and the public (politics, clients, law, patients), between various discourses (the embryo as a discursive object).

[66] http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490461/

[67] http://www.zakonyprolidi.cz/cs/2006-227

Where are bio-objects mentioned? How are they "objectified"?[68]

Ad a) In the case of bio-objects, boundary work also includes the ambiguity of how science itself understands and describes the boundaries of the living tissue – the boundaries between the animate and inanimate, the subject and object of the law, a person and an object/a being, and technology and nature. The process of liminality, becoming and blending, not only affects only bio-objects but also specifically the bodies of women experiencing contact with the ambiguous effects of reproductive biotechnology through assisted reproduction.

An important role in the process of delimitation is played by the language, classification, and cognitive map, as well as the practice of manipulating bio-objects. Gilbert, Tyler and Zackin (2005) and Gilbert (2008), present various examples of how different cultures, and biomedicine and science itself conceptualize, reflect and defines this boundary. Thinking about the origin of a person (the difference between a person and a being), we can take into account the definition of the creation of a unique DNA design – the boundary is then defined by the fusion of an egg and sperm. Another boundary can be defined by the first 14 days, since after this time the development of identical twins is impossible – an individual (indivisible entity) is being formed. In terms of neurology, the first cells of the nervous system are created after the fifteenth day; until then the embryo cannot feel pain, pleasure, joy, or stress. Since biomedicine defines death as brain death, the origin of life and the boundaries of a person can also be defined by it. The last boundary is birth, when the new-born is already seen as a human being with its own rights in our culture. Although current biomedicine offers sophisticated classification of prenatal life, the gradual development from the fertilized egg, stem cells, zygotes, embryo, foetus, and the individual medical sub-disciplines do not offer a clear borderline for the beginning of the life of a being, a person. In terms of social theory, prenatal care is a typical example not only for its use of terminological purification, but also for the decision of when a human being is an object and when an entity with rights, when an embryo is regarded as quality, etc., and when the possibility of research with stem cells or the choice in pre-implantation intervention depends on the definition of these boundaries.

[68] The term "bio-object" may represent one of the strategies of transgressing or subverting the modern concept of the passive object, as opposed to a fully and unquestionably acting human "entity" (Vermeulen, Tamminen, Webster 2013; Franklin, Roberts 2006: 2). Other variants are represented in the term of "uncentred object" or in the redefinition of the object (without an attribute) (e.g. Latour 1993).

In the Czech cultural context, the thinking of how bio-objects are represented, defined and manipulated often assumes and is associated with thinking about the origin of human life, the life of a human individual, a person, a being. These boundaries are the subject of debates and uncertainty. Science operates as a privileged form of knowledge with a hegemonic right to define life and its limits. The most traditional bio-ethical debate is between ontological personalism, which sees no difference between a human being and a person, and empirical functionalism, where they are distinguished and where a human being is a person only on the basis of various features and functions. During the research, I met communication partners reflecting on the origin of life, the human being, its boundaries and how to describe it – and these issues were seen as very important. For some people who defined themselves as believers, however, this did not mean to strictly follow the boundaries defined by their church or another religious or spiritual organisation. For example, one of the communication partners defined the embryo as a material, a non-human entity, and only after she defined the embryo as non-human, she and her husband could have it destroyed. She solved and framed the whole situation as a big dilemma because she is a believer:

> *As part of the agreement you are asked what to do with the unused eggs or embryos… they asked us if we wanted to donate them, and we decided we did not… I dealt with dilemmas… At the first clinic, I talked about it with Michal and we concluded the embryos were not people, humans, so I had them discarded… Although we don't know… it's a material and we don't know if it can survive, that would be unpleasant: we would have descendants and wouldn't know about them.* (IVF client, scientist)

Ad b) The communication partners from the scientific group were apparently fascinated with science itself and had great respect for what they did. Although only few of them were reflective of boundary work, the social impact or cultural background of what they dealt with, they were aware of the boundaries and limits of their professional knowledge. Some speculated about their role as a fascinating and difficult one in terms of choice, accountability, and the inability to see the consequences of current biotechnological changes. Some of them also perceived the boundary between technology and the human and nature as something absolutely fundamental. A bio-statistician said:

> *Since I am a scientist, I'm interested in the limits of knowledge... I was curious, and I'm interested in everything. I've just learned a very interesting fact: paired chromosomes can distinguish which genes come from the mother and which are from the father – this is absolutely fascinating; when they find out these things I find the understanding of how the world works fascinating… It's fascinating, fascinating, fascinating… As a scientist I agree with it; science is just fascinating, knowledge is fascinating… On the other hand, I really dread the moment when technology enforces the technical view of everything even for things that are fundamentally human. When you pass on your responsibility. When a person passes on the responsibility for their own life to someone else.* (Bio-statistician, science institute and medical school)

Some scientists were not able of any reflection. I had a long conversation with a scientist/doctor, professor at a faculty of medicine, who was very kind and wanted to help, as he said. When I asked him if he thought about the social and cultural context of his work and what experience he had with it, he replied:

> *I don't really care about the social context of my research in terms of what the public (that don't understand it anyway) think about my research of bacteria and genes; my goal is basically to do what I like, it's the passion that drives me. I don't think that any cultural context could change my scientific work.* (Doctor/ geneticist, medical school)

As if science was a bumper against what is happening "out there". Gieryn (1999) says that what has to be explained about boundary work is the way in which scientists defend their intellectual territory and separate science from non-science to emphasize their self-image of expertise, authority, and credibility. Kerr and Cunningham–Burley (1999) draw on Gieryn's (1983) concept of boundary work as flexible, historically situated and sometimes ambiguous. However, the fact that even representatives of the sciences and engineering have been thinking about boundary work for a very long time did not seem to resonate in my research sample since it affects the practice of local scientists only minimally. This conclusion is based on the analysis of the interviews, and other materials and texts.

Final Remarks

The previous chapter was not supposed to answer all the questions asked by our joint project, or in this chapter dealing with the manipulation with embryos and DNA. However, it has offered a few common ways to think about the question: *How are the boundaries of bio-objects in the Czech Republic negotiated and defined and what is the local boundary work of science?* To summarize, we can say that a number of Czech scientists, embryologists, geneticists, and molecular biologists build on the modern/modernist ideas about science. These ideas reflect the possibility of reaching a clear and objective truth, of separating the subject and object of observation and manipulation, as a typical sign of the superiority of natural sciences and engineering over other forms of knowledge[69]. The scientists also assume that it is possible to separate knowledge and its application from value judgements and moral and political convictions, which is guaranteed by their expert positions. But there are scientists and doctors who consciously reflect and resolve the ambiguity of assisted reproduction, and the implications of new biotechnologies. They also hold the common normative perspective of dealing with life itself and humanity as something that can be managed, administered, identified by natural science, and clearly and indisputably defined. Many of them also recognize the ambiguity and possibility of human enhancement and new eugenics[70]. The hegemony of science, biomedicine, in how it discusses, deals with, and negotiates on bio-objects also determines the normative nature of the discourse, shifting it to the ideal of expert knowledge and expectations regarding the enhancement of population, including the supervision of physicians[71].

[69] My conclusions, of course, are not based only on the interviews, but also on the analysis of various public statements of scientists, articles, media statements, and regulatory requirements.

[70] E.g. Petr Příhoda, M.D., from the Institute of Medical Ethics at the 2nd Faculty of Medicine, Charles University, said: "*The method is ambiguous. On the one hand, regarding the decreasing fertility of the population in the Western world, it is a blessing; on the other hand, it is a huge temptation to see the man in a reductionist way. The "redundant" embryos are then dealt with as biological waste. The availability of embryos ("in vitro") and the genome knowledge tempts us to assume a purely eugenic approach, i.e. to decide ex post who is supposed to have a chance, and who is not. I feel this belittles humanity, even at the embryonic level. A pragmatic effort not to see these downsides strikes me as intellectual dishonesty. At the same time, I make no comments on the method as such. The efforts to make it ethically acceptable have already had a congenial consequence: we introduce as many embryos into the uterus as we can "use", so we don't have to reduce multiple pregnancies.*"

[71] The process of normalisation and hierarchy of positions of power, for example, in the process of prenatal testing, is shown by Jaroslava Hasmanová Marhánková in her text

This, however, is also related to the fact that there is virtually no relevant public debate on biotechnology in medicine, or on the manipulation with embryos and stem cells, prenatal testing, PGD, therapeutic cloning, etc. In the hi-tech environment of cutting-edge biotechnology, scientific procedures, steps and technology are not critically reflected by journalists, humanities scholars, or philosophers. The 2010 European Commission research on the topic of biotechnology shows that most Europeans are very trusting of expert and scientific knowledge. Most European citizens tend to believe that experts, predominantly scientists and doctors, are the ones who should decide various aspects of biotechnology and defend the public interest. Faith in the experts, scientists, and science in general is also confirmed by the data from my research. This faith also refers to the type of power related to the origin of life that has shifted from the pastoral power of the sovereign to the power of the modern state where biomedicine is a privileged form of biopower. At present, even the traditional biopower in the Czech Republic is transforming into molecularisation, the implosion of orders of meaning: nature vs. culture, the man vs. a machine, etc. (Franklin 1995; Foucault 1973, 2010; Braun 2007, Rabinow 1996, Edwards 2000).

The biotechnologisation of Czech biomedicine is also affected by the legacy of communism on the one hand, and contemporary neo-liberalism on the other hand. I am referring specifically to the focus on the technological side of things, the erosion of the state, public indifference and the emphasis on an individual choice and decision by IVF doctors and/or clients. These options are part of the market economizing bio-objects, the body, and the desire for healthy children or extended lives. The responsibility and risk for decision-making is not only up to the clients, but also up to the scientists and doctors – their personal discretion, preferences, and ethical perspectives. This should be seen in the broader context of bioethics which has a specific position in the Czech Republic. As described by Martin Šolc in "Communism's legacy: ethical yawns" (Šolc 2014)[72], "an average physician solves ethical questions intuitively", says Dr Matějek, and Dr Doležal adds: "The doctors are more aware of the principle of autonomy, but in practice it does not have a big influence on their actions. In the end, they make an ethical decision, but they do so being motivated rather by the fear of sanctions. Even though ethical thinking exists, the practice is not

"Construction of normality, risk, and the knowledge of pregnant body: The case of genetic screenings" (Hasmanová Marhánková 2008).

[72] "*Being so new and small, Czech bioethics has a Catholic background. Other philosophical schools are not well represented. In one of the world's least religious countries, where only one third of inhabitants claim religious affiliation (of whom the majority is Catholic), this is rather surprising…*"

very different from that of the 1980s… Bioethics still remains a very minor interest in the Czech Republic. The gap between bioethics discourse and the opinion of both general and medical public is huge."[73]

As far as dealing with bio-objects in the Czech Republic is concerned, we can see a shift of focus from reproductive to regenerative medicine, and efforts to delay ageing, treatment by stem cells, gene therapy using tissue, and highly sophisticated methods of human enhancement – as in other European countries. This kind of medicine is also a very attractive part of economization of the whole society. The process of commodification and biotechnologisation has caught the Czech public arena unprepared in how to negotiate, problematize or raise important issues and questions the effects of which can be caused not only by technological innovation, but also by the aforementioned deep cultural and social changes being constituted as bio-societies. The Czech Republic is part of the great cultural change, too, and belongs to the emerging or already established bio-societies and biotechnologised networks. It is part of the biotechnologised cultures where various forms of medicine – especially reproductive and regenerative medicine – play a vital and privileged role. At the same time, this process is an iconic manifestation of contemporary forms of power over the life of the population – biopower/biopolitics.

[73] Dr Jaromír Matějek, a bioethicist from the Institute of Ethics of the Third Faculty of Medicine, Charles University, says: *Medical ethics seems to have stopped in the rooms of medical schools. It has been taught for 20 years and I don't think it would have any significant influence on practice in hospitals.*
http://www.mercatornet.com/articles/view/communisms_legacy_ethical_yawns#sthash.6tnDD9xr.dpuf

CHAPTER FIVE

Medicine as Reproduced Powerlessness: Everyday Life in Czech Reproductive Medicine from the Physicians' Point of View

Iva Šmídová, Lenka Slepičková

Since the end of the last century, social science research in medicine has focused primarily on the transformation or disappearance of the traditional attributes associated with the medical profession. These changes, dating from the second half of the century are described using terms such as professional decline (Annandale 1998), deprofessionalisation (Haug 1972) or proletarisation (McKinlay and Stoeckle 1988). The above-mentioned concepts emphasise the different causes of changes to the medical profession, but their description of the basic features of the changes is the same. The main sources of power in the medical profession, defined by Freidson (1988), such as autonomy, specified as the ability of medicine to exercise sovereign control over its own activities, and dominance, outlined as the medical control over other professions in health care, are weakened in relation to changes in medical practice. Doctors work in increasingly complex institutions, their work is increasingly specialized and rationalized and their decisions about treatment processes are influenced by other actors (political decision-makers, insurance companies, pharmaceutical organizations, and patient movements). The recipients of medical care also have a new role. The patients, who are informed consumers, choose from the menu of services and their providers and they are ready, often supported by patient organizations or legal representation, to defend their interests in the treatment process. Access to information mediated mostly by the Internet gives patients the opportunity and desire not only to participate in their own treatment as partners but also to share their experiences of the disease and treatment, including alternative medicine (Cockerham 2009), with others.

However, the critical assessments of the conceptualizations outlined above, as well as of empirical research studies of everyday medical practice, show that this is not a straightforward process of "weakening" medical dominance, nor a one-way transfer of power over the process of healing from physicians to patients. Age, gender and the medical specialisation of doctors affect the extent to which the above-mentioned trends are reflected

in practice, as Lupton showed in her research (1997). As pointed out by critics of the theory of the proletarisation of the medical profession, despite the trends, doctors are able to maintain their monopoly over their knowledge regarding health and disease as the foundation of their professional hegemony even on a long-term basis. They find new ways to maintain their authority and "privilege" even in the changing environment and regardless of their apparently proletarising employment status (Derber et al. in Annandale 1998). Moreover, consumerism, associated with the increasing influence of patients, has its limits – the number of patients suing doctors has been growing, but the number of cases decided against physicians is not too high. Similarly, the opportunities for choosing a doctor or medical facility are very limited (Annandale 1998). However, even Freidson, the classic theoretician of medical domination, points at the polarization of medicine and the proletarisation of certain fields of medicine. The medical profession loses its cohesion as doctors are increasingly forced to formally and publicly assess each other. However, changes in the medical profession can also be more of a contradictory than straightforward nature, and some of them strengthen or weaken their professional power (Freidson 1988).

At the beginning of the 21st century, the medical profession, therefore, finds itself in the throes of contradictory trends: on the one hand, patients expect doctors to be flawless, quick and objective. At the same time, however, doctors find themselves in a situation where they have to deal with medical, psychological, social and managerial work, and communicate with patients who increasingly feel competent and act as sufficiently knowledgeable actors in the decision-making about the treatment process. Regardless of the system, the doctor always ought to be on the side of the patient (Křížová 2006b), and their relationship should be based on the complete trust associated with making the treatment work and the professionalism of the doctor (MacDonald 1995, Evetts 2007). This leads to the paradoxical situation where the provision of health care increasingly pursues market principles, while patients expect the doctors to make decisions based on altruistic motives (Lupton 2003).

This ambiguity of trends in the contemporary medical profession is reflected in reproductive medicine by virtue of the problems it deals with, as well as by its specific position in medicine. On the one hand, this field of medicine is perceived as joyful and positive, helping the birth of a new life, or even as a field where miracles are performed. On the other hand, doctors in reproductive medicine also work with acute cases and life and death cases in an environment of high-profile conflicts over competences, rights and obligations or judicial accountability. However, they generally

encounter patients who do not usually come in an emergency or with life-threatening diseases. The omnipresent "fatefulness" or "game of life" in reproductive medicine has a different dimension: it includes situations associated with radical and irreversible change in human life: parenthood. It includes the conflict of different types of knowledge: the hegemonic authoritative knowledge of modern Western medicine, the knowledge of alternative medical systems, as well as the lay knowledge concerning the body, conception, and birth (Slepičková, Šlesingerová and Šmídová 2012; Foucault 1999; Jordan 1997). Clinical decision-making in reproductive medicine has a strongly normative character and it is not applied only to health and diseases, but also to broader institutions like intimacy and sexuality, kinship, motherhood and fatherhood, and gender identities (Slepičková, Šlesingerová and Šmídová 2012).

The following text will focus on analysing how the daily practice of reproductive medicine is reflected by Czech doctors, both men and women, with a view to broader changes in the medical profession and the transformation of medical care. Our aim is to capture the everyday practice of the medical profession, the ways doctors deal with their power(lessness) and perceive their professional identity, their relations with patients, their conditions, and the challenges in their work. The key to understanding the profession, as emphasized by Freidson (1988), is to study the "work they do". In our research, therefore, we see medical professionals as the key actors in changes to the medical profession, as well as the informants who mediate the ambiguity of these changes.

There are not many Czech studies in the sociology of reproductive medicine as indicated in the opening conceptual chapters of this book. Nevertheless, a few notable research endeavours have already started outlining the field under focus: besides the rather historical analysis of the Czech maternity wards by Tinková (2014), there are analyses by Dudová (2012a and 2012b), Hasmanová Marhánková (2008), Hašková (2001a and 2001b), Hrešanová (2008 and 2014), Hrešanová and Hasmanová Marhánková (2008), Slepičková (2009, 2010 and 2014), Zamykalová (2003 and 2006) and several articles in a recent collection of texts published in a thematic journal issue *Health And Medicine: Post-Socialist Perspectives* (Speier, Šmídová and Wiercinski 2014). Some rather anecdotal evidence (yet on the big quantitative data) on the burn-out of Czech doctors and the non-sustainable situation of the Czech health care system has been already published elsewhere (Slepičková and Šmídová 2014) and its descriptive analysis, too (Slepičková and Šmídová 2014). Our text is aiming to provide a deeper insight into the situation that physicians in reproductive medicine find themselves here.

Conditions for the exercise of the medical profession are largely defined by the health care system; in the Czech Republic, it is the system of post-socialist and only partially-transformed health care. The healthcare system provides free medical care for everybody, based on compulsory health insurance paid by all economically-active citizens and a system of solidarity (to children and the elderly). Currently there is a big debate in the Czech Republic on the "standards of care", delineating the scope of medical treatment that will be continued to be covered by the general health insurance, and treatment "over and above the standard level" to be paid by the patients themselves. Most hospitals and bigger clinics are state owned and run, some private in-patient institutions exist, and most general practitioners and even a few specialists work in their private surgeries.

While health care is partly based on the continuing principle of state-organized and broadly-accessible care and partly on client-access market principles, physicians find themselves in the middle of a system which is repeatedly referred to as unsustainable or "in crisis".[74] Many actors address the situation by leaving an environment that is considered to be too draining (typically, a large hospital environment), or withdrawing from the medical practice.[75]

This situation is also reflected in the organisation of reproductive medicine. Reproductive medicine was also significantly affected by transformations to Czech medicine: medical facilities are forced to

[74] The themes of crisis, stress and system failure appear in professional journals repeatedly. The issue 5/2013 of the Czech Medical Chamber journal, Tempus Medicorum, extensively deals with "the current crisis in health care", following the parliamentary seminar of the same name. The article by Kubek refers in particular to the economic crisis, which causes a "moral and ethical" crisis, and highlights primarily the lack of funds in medicine, ageing doctors, the decline in the quality and availability of health care, and the financial system.

[75] The dissatisfaction and frustration of medical professionals can also be seen in the extensive and publicised, albeit – in relation to the population of medical professionals – unrepresentative research "Stress and the burnout syndrome among physicians in the Czech Republic", carried out by the Czech Medical Chamber (Camera Medica Bohemica) and the Psychiatric Clinic of the First Faculty of Medicine, Charles University and the General University Hospital in Prague, in mid-2013 and referred to by the authors under the eloquent title "The Burnout of Physicians in Bohemia" (First Faculty of Medicine, Charles University, 2013).

The working conditions form the basis of potential problems and personal frustrations, including the excessive self-assessment of the actors. These can be expressed in protest actions, such was the initiative "Thank You, We're Leaving" in 2010–2011, when the Czech doctors threatened massive resignations with the aim of improving working conditions, especially in terms of health care financing, the insurance system, the training of doctors and daily medical practice, which makes many facilities operate in a regime of labour law violations and doctors working overtime.

compete[76] for pregnant women and mothers and to continue their existence by marketing a wide range of services and choice of treatment at birth (Hrešanová and Hasmanová Marhánková 2008).

Concerning assisted reproduction, it has a long tradition in the Czech Republic, since the first test-tube baby was born here back in 1982. It is provided in both state and private institutions and is partially covered by the obligatory health insurance (4 in-vitro-fertilization cycles without any additional pharmaceuticals or procedures are covered for women under 39 and applying for the treatment with a male partner with the condition of a single embryo transfer in the first two cycles). In 2012, there were 39 institutions providing infertility treatment using ART in the Czech Republic. The regulation of assisted reproduction in the Czech Republic is relatively liberal: unlike in other European countries, all techniques of ART are allowed and used in the Czech Republic – in vitro fertilization (IVF), Intra Cytoplasmic Sperm Injection (ICSI), assisted hatching, selective reduction of embryos, pre-implantation genetic diagnosis (PGD), cryopreservation of oocytes and embryos, and the anonymous donation of sperm and eggs or embryos. On the other hand, surrogate motherhood is not regulated by law and its realization is connected with many potential risks for all persons involved since Czech law considers only the woman who gave birth to a child being its mother. Moreover, techniques of assisted reproduction are widely accepted and their use in cases of infertility are regarded as appropriate and the expected behaviour (Slepičková 2007). The high success rate and the high quality of treatment in general, combined with the relatively low prices and the availability of donor procedures (and donors) are reasons why the Czech Republic is a very popular country for reproductive tourism (Whittaker and Speier 2010).

In the practice of obstetrics, it is compulsory to give birth in hospitals in the Czech Republic – there are no alternatives. The biomedical standard of care in maternity wards, measured by various indexes and statistics, is often taken as the proof and guarantee of the top level by international standards. So far, only limited attention has been paid to the well-being of birthing women and their satisfaction with the experience of giving birth. This clash in the standards of care provided and in the expectations of the various

[76] Unfair competition exists also among large, research institutes and smaller regional hospitals. Due to many legitimate reasons, the power elite in obstetrics is recruited from university clinics and they defends their own interests. Recently, for example, the Hospital Association of Gynaecologists and Obstetricians (SNGP) dealt with the requirement to close all maternity wards with less than 800 births a year at the national conference of the Czech Gynaecological and Obstetrical Society (ČGPS) in Brno in 2012. The number of births was then used as the pivotal indicator measuring the quality (professionalism) of provided care.

actors involved is one of the key elements in the polarised debates in the media and in public more generally, concerning the quality of medical care at childbirth in the Czech context.

Doctors working in the field of reproductive medicine find themselves in a highly competitive environment and they are burdened with responsibility towards both their patients and employers. They meet patients who often have a clear idea of what their birth or conception should be like and who are assertive actors both in dealing with the doctor and looking for information and the facility that best meets their requirements. In assisted reproduction, patients also pay for a number of professional interventions themselves, which greatly affects their attitude to the care provided (Slepičková 2009). The chain of service provision in this environment is further influenced by interpersonal relations among the doctors (e.g. the gynaecologists who recommend their patients to various centres of assisted reproduction) and the interests of other stakeholders, such as insurance companies, the state and the companies selling drugs and medical equipment.

Fieldwork Data

The empirical material used in this chapter is composed of 30 in-depth interviews with physicians working in obstetrics, gynaecology and assisted reproduction in different locations and facilities in the Czech Republic. The interviews were conducted by the authors of the text in 2012–2013. They did not have a given script, but followed a list of specific topics related to professional education, experience, and relations with patients and other subjects influencing daily practice. The interviews were recorded, transcribed verbatim, and analysed in accordance with the respective qualitative discourse analysis targeted to define the pattern of relationships and meanings reflecting not only daily practice in reproductive medicine, but also the main dilemmas and problems related to it. The analysis relates individually-experienced exhaustion or burnout[77] to external structural conditions, such as the formal and informal hierarchical setting of the medical environment, professional socialisation, problems in reconciling work and personal life, contact with patients, and work in an environment of limited time, economic and human resources.

[77] For further illustration of burnout in reproductive medicine, see Šmídová and Slepičková (2014).

The physicians were approached by the authors using contacts from previous research projects, conferences and social networks. Doctors from the Czech assisted-reproduction centres were also contacted by e-mail with an offer to participate in the research. During the enrolment into the research study, the authors did not seek representativeness, as neither the project nor the planned sample was made up to fulfil this criterion. They rather strived for diversity in the sample in terms of gender, age and the workplace of the actors, so that their views and opinions could show the diversity of working conditions in assisted reproduction and obstetrics, attitudes of doctors and their relationship to their profession. Therefore, the sample represents both doctors working in small hospitals and surgeries in border areas and well-known doctors who (often literally) represent this field of medicine or who, on the contrary, publicly express their critical attitude towards the practice of reproductive medicine.

Empirically, the authors draw not only from qualitative data, but they also use quantitative data from a representative survey of the medical population which took place at the end of 2012 and also dealt with the current problems in medicine.[78] The data was collected in November and December 2012 and the tool used was a questionnaire in the form of a guided (face-to-face) interview with a respondent. The sample included a total of 1,200 doctors from across the Czech Republic, and its representativeness was achieved by quota sampling. The sample is representative for the Czech population of physicians in terms of gender, age, character of enrolment in the profession (employed and private physicians), and region[79].

The first part of the analysis in this chapter deals with the findings from the quantitative data analysis, mainly focusing on answers to an open-ended question regarding problems in medicine as seen by doctors.[80] The text then focuses on two selected key areas concerning the doctors mostly associated with burnout, frustration and indignation. Firstly, it is the physician-patient relationship that is elaborated upon. This part of the text analysis is primarily based on interviews with doctors in assisted reproduction, where the doctor-patient relationship has significantly shifted towards the client-provider relationship. Secondly, the text moves on to the reasons that doctors articulated as motives for their decision to leave the workplace, most frequently the hospital. The passages and analysis illustrating this topic are based on the interviews with gynaecologists and obstetricians with lengthy

[78] The data was collected by INRES – SONES, v.o.s.

[79] However, the sample was not representative in terms of the medical specialisations represented in the research.

[80] For detailed results of the quantitative data analysis, see Slepičková and Šmídová (2014).

experience in maternity hospital wards. Their careers in predominantly state-owned institutions are often in sharp contrast with the relatively well-off private practitioners in gynaecology in out-patient surgeries and practices. Our analysis concentrates more on hospital everyday practices. Maternity hospitals represent workplaces with particularly difficult and demanding working conditions. Acute health care meets a 24/7 non-stop rhythm of work and and has clearly-formulated expected results. Obstetrics is also a medical specialisation which is expected to lack specialists in the future. Obstetricians leaving the hospital environment are partly motivated by the threat of litigation when childbirth or related hospital care results in serious harm to the health of a child or a woman giving birth. The so-called "forensic negative repercussions" were often discussed as a threat, although the risk of complications itself was always considered an integral and unavoidable part of obstetrics.

The Biggest Problem of Contemporary Medicine as Seen by Doctors

As a part of the representative quantitative survey, respondents were asked an open question about what they see as the biggest problem of contemporary Czech medicine apart from finances. A sample of 1,200 doctors formulated 1,458 answers that were categorized into about 40 topics. They describe the working conditions in which they have to cope both with time and administrative overload, and the increasing responsibilities, including the legal ones. They also describe structural requirements that seem to be nonsensical and the expectations and attitudes of patients. The problem of contemporary medicine is seen as a structural problem; the doctors often mentioned chaotic and unsystematic management ("pervasive confusion", "total chaos in health care"), the disruptive comings and goings of Health Ministers, the lack of vision and hastily-introduced changes ("nonsense reforms"). They also emphasised the strain related to paperwork and bureaucracy, and the work overload ("little rest", "working hours"). They also complained about the problems and obstacles on the part of health insurance companies.

But it was the patient who was seen as the biggest problem in contemporary medicine in the answers to the open question. The patient is seen as both a problematic element (the answers described the "ruthless", "aggressive", "irresponsible" conduct of patients, their "excessive

expectations", "complaints", "distrust", "breach of the therapeutic regime" and "treatment abuse") and as a victim of care systems.

The category identified as "time dedicated to patients and access to them" in the analysis also deserves attention. The authors of this text provide a detailed analysis of the answers in this category in a separate text (Slepičková and Šmídová 2014); in the summary, the category includes the problems related to limited opportunity to devote sufficient time to patients ("the patient doesn't come first", "many patients, few doctors"), problems in the relationship between the doctor and the patient ("communication between the doctor and the patient"), and the lack of a comprehensive approach to patients ("paperwork comes first and the important issues are not addressed, etc."). Such a view does not see the patient as the culprit, but often rather as a victim of structural problems, mainly the overload and poor health care organization. The responses also describe the problem in communication between the doctor and the patient as a mutual problem, not as a consequence of the "incompetence" of patients. The responses also suggest that the current health care system creates a situation which produces dissatisfied patients (although their illness may result in the aggression and indiscipline the doctors complain about) and frustrated doctors. Doctors feel they do not offer patients as much as they want, can or are expected to, both in terms of materials ("we economise on materials", "lack of medicines", "fewer beds"), and relationships ("relationship depersonalization", "lack of a holistic approach"). It is a situation that makes both patients and doctors powerless ("the apathy of doctors because nothing will change"). This is related to more general social shifts in the changing role of medicine towards being more commercial ("medicine has become consumerist", "the vulgarness of society", "the consumer organisation system of health care") with an emphasis on technological progress and efficiency ("too much technology, dehumanisation"). In effect, the shifts limit the autonomy of the doctor who is forced to adhere to a number of external restrictions and regulations that may be in conflict with the rights or interests of doctors and patients, and disrupt their mutual communication, relationship and trust. Based on the accounts of medical doctors, their fear of legal consequences derive from existing precedents of legal action initiated by patients who feel harmed in the process of treatment. Thus, their everyday practice is influenced by such potential effects and are transformed into their preventive interventions directed more towards the safety of medical professionals than the health and safety of the patients. These may result, in extreme circumstances, even in doctors quitting the specialisation.

Physicians versus Patients

The answers provided by gynaecologists and obstetricians in the qualitative part of the research, i.e. in-depth interviews, indicate how the imaginary "conflict" between patients' expectations and the doctors' idea of the treatment and care works in this specific environment. Doctors in reproductive medicine find themselves confronted with the impatience of patients who expect only positive results from treatment, i.e. the conception and birth of a healthy child whose arrival has often been put above all else in their lives. Treatment in this specialisation does not result in the improvement (or not worsening) of their health status, as may be the case in other fields of medicine, but rather in overcoming the obstacles of conception or in mitigating the risks. Even a promising procedure (culminating in the embryo transfer into the uterus in assisted reproduction) can suddenly fail, and both the patient and the doctor have to go back to the starting point of the path to parenthood. Assisted reproduction treatment also involves money paid by the patients who, from the doctors' perspective, sometimes increase the already unrealistic expectations and tendency to see the treatment rather as a service with a guarantee of success. Similarly, the obstetrics patients do not allow for any other result than a happy, contented family. Moreover, pregnancy and childbirth are not diseases requiring treatment in the true sense. It is an event cutting across several disciplines and approaches to the human body, care and interaction with the key players. This is also reflected in the current heated public debate on the situation in obstetrics in the Czech Republic. For many doctors, such a working atmosphere is yet another source of stress, feeling the misunderstandings and conflicts that affect individual persons, because no significant structural action and change has taken place.

Access to treatment provided as a service entails the transformation, more specifically the weakening of the position of the doctor (and clinical decision-making) as an authority over the course of treatment. Such a potential shift is described by the doctors as a loss of the trust, humility and gratitude traditionally proffered by patients. Patients are no longer as passive as doctors expect them to be but try to discuss and make decisions about the treatment. In addition to the aforementioned financial aspects of the treatment, the transformation of patients into investors or active and assertive consumers of medical services is also enabled by the availability of information on the Internet. This source of information is presented by doctors as very misleading and inaccurate, and generates inappropriate expectations.

> *Today, the biggest problem is probably the patients; they are very well-informed, but unfortunately, they lack humility. The doctor has lost the unique position; clients want to dictate something, they feel like they are in a supermarket where they can buy anything because they have the money, and they pay us, so we have to do what they want. And they've also read about it, they know it all.* (Dr Johnson, man, owner of a private fertility clinic)

The loss of humility towards the doctor's authority and the access to treatment as a service is related to the lack of positive feedback the doctors often mentioned in their answers. They compared the situation with the past when the patients used to acknowledge them and their achievements long after the birth of the child, when they used to send their photographs etc. This contrasts with the negative feedback that patients today often publish on the Internet, which seems to be more common than the positive feedback. Therefore, the doctor is exposed primarily to the dissatisfaction and complaints of the patients, without having the positive feedback.

> *If things go well with the patient, one either doesn't meet her at all or meets her only once at a short ultrasound session when she is told she is pregnant. Then she sees her gynaecologist (…). While the unsuccessful mothers, who publish everything on the Internet, or, God forbid, send complaints to the Medical Chamber, are what we face every day.* (Dr Williams, man, private fertility clinic)

Such short interaction and limited relationship with his/her patient cannot provide a feeling of satisfaction to the physicians and do not create any space for gratitude and positive feedback. The call for more complex and long-term relations by doctors can be viewed as the call for the human touch in the instrument-dominated settings. On the other hand it is the expression of the need for the broader role than reducing the physician to routine and the role of a paid service provider.

Doctors in assisted reproduction describe their patients as stressed and in a difficult situation because they cannot conceive the planned child. Stress and impatience (and even aggressive or "uncouth" behaviour) are often related to the preceding long-term postponed parenthood.Therefore, when the patient decides to be a parent, she wants to (and, because of her age, she also has to) succeed as soon as possible. A long-postponed desire to conceive a child gets her in a difficult life situation in many respects (tension

in the relationship, family pressure, financial difficulties, etc.). At the same time, the doctors described "postponed parenthood", attributed exclusively to women, as quite irresponsible behaviour.

> *They find there is only the last accessory missing in their lives because otherwise they already have everything. Now they also need a baby. Then we have to explain to them that it's not that simple, that we can't cheat nature in any way, that we can only help it while respecting it.* (Dr Johnson, man, private fertility clinic)

According to the doctors, however, it is not only irresponsible to postpone parenthood until women are "provided for and have everything ready", but also the opposite: to pursue for parenthood in a situation of poverty. Unemployed couples, for example, are seen as unworthy of parenting efforts due to their lack of finances.

> *There are also those patients who come and say: We want a child. – And where do you work? – I'm unemployed. – And you? – I'm unemployed. Do we have to pay anything? Five thousand crowns? Well, we don't have the money. Then one thinks: How will they feed the kid?* (Dr Smith, man, private fertility clinic)

Complaints about the irresponsibility of patients are also related to a broader issue of the relationship between doctors and patients. It often reflects the different social and cultural status of the average physician and the average patient, their different negotiating positions and different life situations (a childless couple vs. a doctor – a successful man and a parent). There is a mismatch between the values of patients and doctors: doctors are asked to treat patients who are seen as people wilfully damaging their health (e.g. by smoking, obesity) or future irresponsible parents and appropriate objects of "education". Since doctors cannot refuse the treatment, they assume a non-judgemental and professional attitude towards their patients, but communication is considerably strained, probably on both sides:

> *Sometimes you don't even understand what the couple has in common – how they interact with each other in the office – and you think: God, they hate each other just sitting close, and yet they want to have and raise a child. And there are many couples like that. I love it when someone says: We want twins. Let's get it over with, let's have it done. So I say: Don't have kids then, because you're supposed to enjoy it, not to get it over*

> *with. So such situations make me think… We treat the people but we feel like educating them like kids, but that's not possible, unfortunately.* (Dr Taylor, man, private IVF clinic)

The quotation above illustrates the overlapping of the treatment with the social control activity of the physicians, albeit regulated rationally. As doctors are supposed to take the role of the church in the modern society (Zola 1972), providing IVF treatment is close to the consecration of the right patients and the right parents-to-be as well. This means that parents are defined in the terms of a stable heterosexual partnership, expressing the wish for parenthood and the willingness to sacrifice (financially, physically and, in the case of religious couples, ideologically as well) themselves for the sake of their future child. Anyone outside this framework is supposed to be undeserving of the treatment as religious couples, who are accused by doctors for the inconsistency of their attitudes.

> *In general, the most difficult is to work with a prejudiced patient.*
>
> *Researcher: What kind of prejudice do you mean?*
>
> *Religious ones. This is allowed and that is not… And the worse is that hybrid in the end. One patient asked me: I wonder what you are going to do with my frozen eggs? But the question is, what you (with stress) are going to do with your frozen eggs?! There are 12 of them, so you have to give birth to all of them. This is the only solution I can see. (…) If I am a Christian and I believe that conception has to happen only as the act of love, the only thing I can do is to f… at home until the woman is pregnant and until she is, I can devote myself to gardening or charity.* (Dr Thomas, man, owner of a private fertility clinic)

Although "life is not at stake" in reproductive medicine, as the doctors themselves say, what is at stake, in a metaphorical sense, is the life (potentially) being born. Face to face with the depleted, stressed and impatient patients, doctors can find themselves in a position of powerlessness because many of the processes contributing to the success or failure are not exact. "Telling the patients the truth" that "it didn't work" or answering the "why" questions were described as the most difficult aspects of treatment, which are demanding not only because of the situation where the doctors have to confront the emotions of patients but because they also raise doubts about their abilities and effort. The fact that doctors have no answers to some of the questions means a fundamental distortion of their image as sovereign

experts who not only flawlessly master their craft, but who are also able to change nature and perform miracles. It is also difficult to accept an unsuccessful outcome, even if the doctor choses the correct procedure. At the same time, it is necessary to handle the situation in a professional way and think about the next steps in the diagnosis and treatment.

> *(The hardest thing is) to tell them the truth. To tell them the nasty truth: It didn't work out; the heart isn't beating; the child is lost, but you have a great chance it'll work out next time, so you have to fight on. The hardest thing is telling the truth (…). This is the most difficult thing to say to the patients, to take the responsibility to tell them.* (Dr Smith, man, private fertility clinic)

Even seemingly routine work at an assisted reproduction clinic, as the physician tackles the life-threatening or rapidly changing conditions rarely in comparison with other medical fields, is not short of stressful situations caused both by the communication with patients and the pressure on the success of the procedure (embryo transfer). Moreover, the surgery is a climax of a long preparation of the woman's body using hormonal stimulation and a number of diagnostic procedures and interventions. Occasional purely-technical problems during the transfer are interpreted by the doctors as their own failure.

> *It's stressful because it's a failure. You perform a procedure which seems utterly banal, and yet it's actually the end of the relay race when lots of people had already done their best, and then all of a sudden, it just doesn't work out because something goes wrong either due to human error or simply due to objective reasons. But one is troubled about it.* (Dr Taylor, man, private fertility clinic)

In addition to the responsibility towards patients and colleagues, the pressure of external circumstances is also generally perceived as extremely restricting. This includes competition between the centres of assisted reproduction, the pressure towards corrupt practices, coming from practical gynaecologists who recommend facilities to their patients or pharmaceutical companies, or the economic pressure, making the doctors consider both the wishes and interest of the patients and the "viability" of the procedures for the employer. Moreover, officials and insurance companies have doctors by the short and curlies, with their limits and regulations that complicate the clinical decision-making and practice. The limits to the

existence of small centres based on the average success rate, for example, can be threatening since they might be the centres treating women who were not successful elsewhere, which in effect decreases their measurable success rate. This situation is an example of the subordination of doctors to the external conditions of treatment which robs them of their control over the decision-making process and their professional autonomy.

> *You're simply the worst and that's where I see injustice and danger because the officials have us by the short and curlies and so do the insurance companies. They can make decisions about you, and no one asks you if you have invested in it, if you have debts or not, they just adamantly close the facility down.* (Dr Smith, man, private fertility clinic)

The evidence provided above reflects broader trends in the provision of health care that expose the patient and the doctor to new dilemmas and new collisions. The process of de-professionalising and routinising the medical profession (i.e. the loss of its traditional autonomy, prestige and authority) is also related to the emphasis on the patient's choice and autonomy (Dent 2006). This is, however, in contrast with the traditional expectation that the relationship between doctors and patients should be built on trust. In such traditional environments the patients entrusted themselves to the clinical decision-making and expertise of the doctors, and submitted to the medical recommendations and method of therapy. Reproductive medicine more than any other specialisation encounters clashes related to the broader questions of lifestyle and choices, and the incongruence between the values of the doctors and the patients.

Structural Obstacles and Exit as a(n Individual) Solution?

There was one more issue in addition to the typical notion that the key issue of today's Czech (reproductive) medicine are the patients themselves. Besides the tempting idea of managing without them (as active participants in health care), the answers of the doctors also dealt with the more general terms and conditions of their work, especially in hospitals. Their unbearableness even made many research participants leave their workplaces. The rest of this chapter will focus mainly on their incentives, as well as describing the status quo that leads to such withdrawals.

Only when the doctors leave the hustle and bustle, do you realise the absurdity of the system of services offered in regular working time, and how ruthlessness it is to the body.It gets literally embodied. It is a combination of factors. On the one hand, there is the (physical) addiction to the extreme physical and mental stress, to the gratification coming with health/life-saving or balancing on the edge of life and death. These are complemented by exhaustion, frustration and lack of recognition, and strongly-hierarchical competitiveness in the team (particularly in large hospitals). The work team also formed the frame of reference of what the doctors said about their work experience, how they were able to stay on or what contributed to their withdrawal.

> *If you don't sleep in your own bed every day, it starts to be physically demanding at a certain age. When I was leaving, the usual shift meant work until 4pm, then you were on duty and served until seven in the morning, then you worked from seven to four again and only then could you go home, you see? And if you worked in obstetrics, you could experience four sections per night – although this was exceptional – and then you were just like a zombie. Which is not exactly optimal for anyone, neither for the doctor nor the patients you subsequently take care of.* (Dr Swan, woman, senior doctor, owner of a private practice in a city, formerly at a university hospital)

In addition to the physically demanding work, the doctors also mentioned they had no time for personal life outside of work. They often noted: "I don't have a life".

> *Suddenly you just start to be tired and your body stops obeying you. It's already demanding to get up at two in the morning, perform perfectly well until seven in the morning, then work again the whole day and then go shopping in the evening, cook, take care of your family and children, and have a chat with your husband, so that he doesn't feel left out, so (…) suddenly your body just sort of gives out. And then you don't have the energy that would drive you anymore, and when you finally succeed or feel you achieved something, you don't have that drive that kept you going anymore (…). And especially… especially your psyche… I mean, if you work with diseases, dying and acute states from a very young age, you can experience a lot of mentally challenging moments even in obstetrics and gynaecology.* (Dr Pearl, woman, at a private fertility clinic, formerly the head of the maternity wing of a university hospital)

After hearing these interview accounts, situations where doctors decide to stay in the hospital are actually quite surprising. Some doctors explain their willingness to endure the tremendous physical exertion and intensity of work, and take the medical responsibility in the working environment just described (especially in hospitals) by references to their addiction to adrenaline and heady awareness of being indispensable. The atmosphere is of strong dominance of the medical profession, which is connected with a reluctance or even resistance to change the status quo of the everyday practice and relationships with other professions and patients.

> *Surgery is very exciting and interesting all the time; I really enjoy operations. If you haven't operated on anyone, you can't understand. Don't get me wrong.* (Dr Calcite, man, private practice and part-time job in a small hospital)

> *Few doctors retire when they are sixty, they are carried out on the bier (…). They keep on working, you know.* (Dr Plaster, man, head/senior doctor in a smaller hospital)

> *It happened to me, and it can happen to you, too, that when something goes wrong (…) you start analysing it and you think: Do I really deserve this? I'd rather work as a medical examiner or review doctor. I'd do something where I won't have to… But then you realize you'd miss the contact with the people, you'd stop being the bearer of good news, and you'd stop helping (…). The work wouldn't be creative. So I humbly returned and stayed. Yesterday, for example, (after a hearing of the doctoral commission) I came home with my blood boiling and then I said: OK, let's get it done in the morning.* (Dr Albino, man, private practice and deputy senior consultant at a university hospital)

As stated above, in addition to the exhaustion from hospital work and its penetration into personal life, the professional career of doctors is complicated by workplace relationships, both interpersonal ones and those deriving from the work organisation. Doctors respect the hospital regulations as a highly-bureaucratised, formal organisation with clearly-defined competencies and with enormous responsibilities placed on the head doctors (senior doctors or consultants). Years of experience and skills are important especially in obstetrics. Therefore, the division between younger and older doctors is justifiable, although it can become a source

of frustration. The problematic issues presented by doctors from maternity wards included moody bosses and their personal preference in the selection of assistants and successors, often not seen as based on "skills". Moreover, such patterns were passed down the generations: the chosen successors imitated their predecessors. This imitation also strongly reflects the gender element: senior consultants primarily choose from men-candidates.[81]

Doctors also complained that the contemporary organisation of their work doesn't emphasise the key attributes of the medical profession anymore since it has now become a career. Treatment ceases to be based on care and service to patients, and the working environment becomes more competitive.

> *When I was leaving, they didn't threaten to fire me – I'd just had enough. You constantly have to try hard to keep your job because everyone dreads the thought of losing their own. So I told myself I didn't care and actually would be happy to leave it to someone who didn't want to leave. (…) It was mentally challenging to live with some of the people; there is a constant competitive sham fight (…); honestly, the important thing wasn't how you worked, but how you presented yourself.* (Dr Zinc, woman, smaller hospital on her leaving a university clinic)

At the same time, doctors, particularly senior doctors from smaller hospitals, refer to the problematic nature of separating work to outpatient (often private, lucrative) care and the hospital environment without proper remuneration. The practice of being confronted with neglect forms yet another perspective as sometimes the recommended procedures do not reflect the limited options and personal responsibility of senior doctors at smaller facilities. These are set by large clinics and were reflected as an unevenly distributed burden.

> *In the context of what is viable, we work the way I imagine the specialisation should be. To me, it's necessary to combine the outpatient and hospital components. Their separation is wrong, I think. Because there's an army of gynaecologists who don't have the responsibilities we have but we're supposed to sit and wait for what they graciously send us, and be on duty at night and ready since there always have to be at least two doctors available. But they're just sitting pretty and getting their money.*

[81] An analysis of the ambiguous and complicated position of senior doctors (consultants) from this perspective is elaborated in another text (Šmídová 2014). However, their choice is understandable from several particular aspects.

> *I think that this is wrong (…) because hospitals won't be able to work like this and there'll only be a lot of happy-go-lucky gynaecologists from seven to three in the afternoon.* (Dr Chalk, head doctor in a smaller hospital)

> *When something goes wrong in the surgery, they just dial four fives and send them here. When something goes wrong here, we have to resolve it in 99% of cases.* (Dr Plaster, head doctor in another smaller hospital)

These moments pervaded the narratives of the research participants, creating a complex of relationships, circumstances, and conditions under which doctors work on a daily basis. Structural interdependence of everyday hospital practice and the hierarchy in the decision-making or advocacy in problematic situations are circumstances the doctors were not prepared for in the existing educational process. Professional expertise and erudition, emphasised in formal university education, is not enough to keep human integrity during the professional career, to endure the great personal strain, reflect, and keep a healthy distance from the everyday confrontation with the health care system. Therefore, doctors look for their own personal solutions and escapes, they feel lonely and frustrated, have little faith in the possibility of structural changes for the better, and practise the mode of behaviour they learnt at university: to bite the bullet and keep their chin up, until the body breaks down completely.

Conclusion: Powerless Doctors in the Powerful System of Medicine

The chapter has presented two areas the doctors presented as key for their experience of frustration, fatigue, and the failure of the medical care system. We have analysed several transcribed passages to illustrate the connection between individually experienced exhaustion to the external structural conditions. Although the text could not cover the complexity of the external (social) influences on everyday health care, we have pointed out several aspects creating a dismal picture of medical practice in two specific areas of Czech biomedicine.

The traditional image of the doctor as a specialist, gifted with specific power and authority over patients, is unsustainable in the late-modern health care system and leads to a strong frustration both on the part of

doctors and patients. Doctors have to cope with the constraints of their power, whether caused by the influence of external factors on their daily work or the demands of patients to take part in the decision-making process concerning their own treatment. Due to the commodification of services and the market functioning of health care facilities, health care places new demands and creates new relationships. Physicians find themselves in a situation where their role is not clearly defined, but the expectations towards them are increasing. The system they work in is not flexible enough, yet it requires flexibility from them, and it often does not provide them with clues for their own decision-making, defence against disgruntled patients or an environment for communicating with them. In theory, reproductive medicine is opening its door to new arrangements for both the services and communication; doctors, however, are not ready for such changes.

The set rules of the working environment for doctors are in many respects still deeply rooted in the institutions of the former political and economic order, and conservatively resist certain changes and trends brought about by the transformation of society, the empowering of patients and (bio)medicalisation in medicine.The social structures have a strong drive towards inertia and the status quo changes very slowly. Therefore, the demand for greater freedom of choice for the patients and self-realization and recognition for health care professionals clashes with the obstacles from the previous regime. Another significant aspect influencing the everyday practise of reproductive medicine is the need to cope with the challenges of biomedicine and the related ethical dilemmas, the interests of influential groups, and the current government policies aiming to control the population through medicine (population policy, legislative setting for health care).

The medical profession is also influenced by other aspects which structure the social world by default. The hierarchical relationship between the (well-educated) doctors and the care recipients from all spheres of the society (including minorities) tempts the health care professionals to educate the patients. The division of the society into a private and public sphere and the related stereotypical idea of men with working careers and women in family care, in turn, are reflected in the gender-biased generalised expectations, whether it's the attitude of senior doctors to work ambitions and the enthusiasm of women doctors, family life arduously reconciled with a demanding profession or the attitude of doctors to the anticipated characteristics of their women-patients.

The strong formal and informal hierarchical settings of the medical environment both in clinics and hospitals and various workplaces maintain

and reinforce the doctors' conviction that health care is badly organised. Work in an environment of limited time, economic and human resources, together with the "bad mood" reflected in interpersonal relationships and the focus in some workplaces rather on the form ("presentation", "competitive sham fight" or profit) than the service and care, create yet another distinct orientation axis of experienced frustration and powerlessness. This is accompanied with the shortcomings of professional socialisation and supervision on the one hand, and on the other hand, the difficulty to reconcile work with personal life and the physical limits to human endeavour that the doctors can invest at various stages of their lives.

The research data prove that one of the responses to this situation is to strengthen the power mechanisms sustainable even in the current situation – i.e. the power over patients, resulting from both the superior position of the doctor and the possibility of intervening in the most sensitive areas of the patients' bodies and lives. The power can also be obtained from within the medical hierarchy itself. Doctors quitting to other working sectors are an extreme consequence of the powerlessness to change the situation or find the elements that could compensate for the experienced injustice. In the long run, however, both of these solutions are unsustainable for health care.

We have framed our analysis within the omnipotent, powerful, hegemonic position of the expert with the authoritative knowledge of (bio) medicine. It demonstrates a set of knowledge that seriously influences our everyday understanding and approach to issues such as health, body, illness, even life and death. This powerful institution is, nevertheless, composed of the everyday experiences of individual professionals, medical doctors, that represent unquestionable authority – as representatives of this long-established discipline. On the other hand, these actors operate on the edge of the dark sides of such a composition of powers. This does not make them or biomedicine necessarily less powerful, rather, we wanted to illustrate the inherent ambiguity of such power structures. Power, in the understanding of Foucault (1996), is not one-sided, homogenous and visible. It is more a matter or relationships and a result of many forces. Our analysis has shown the effect of the shift in the very base of power – knowledge (Foucault 1999) –from doctors to patients, or more precisely, to the clients.

The key findings of our analysis should become part of the focus on the transformation of medical care and the organisation of the Czech health care system. We are in a situation where the health care system is seen as omnipotent and the limits or boundaries of medical procedures are presented as diminishing, yet the individual experiences of doctors reflect

their powerlessness. To keep at least some control (traditionally granted and ascribed to medicine) over events, doctors use their power and (more or less unconscious) efforts tocontrol the process of treatment and also judge broader attributes related to patients. They patronisingly evaluate their lifestyles, care for bodies, or their professions. Thus by controlling their patients, the recipients of care, the doctors delegate their powerlessness to them. So far, personal commitment to the public good is a fairly established tactic in the Czech Republic, and neither the patients nor the doctors reflect that they are actually in the same boat on the sea of government regulations, the medical industry, and technological progress. This tension between the individually-experienced powerlessness of doctors (and patients) and the expected omnipotence of medicine has to be vented and closely observed, while attention needs to be shifted from social analysis to the realm of political action in forming strategies and influencing decisions.

CHAPTER SIX

Establishing Trust – the Patient's Responsibility. The Role of Trust between the Patients and the Doctors in Assisted Reproduction

Lenka Slepičková

Trust, as the ability to rely on doctors and to believe that their behaviour is guided by the interests of the patient (Pearson and Raeke 2000), is one of the key elements of the relationship between the doctor and the patient which has persisted right up to the present in modern medicine. Trust is a key mechanism connecting doctors and patients, and is the foundation of professional autonomy in medicine (Fugelli 2001). Sick people have an increased need for trust which helps them cope with their existential angst, the risks, and the loss of control over their body, their social roles and the future (Fugelli 2001). This loss increases the need to trust others, especially doctors. According to Mechanic and Schlesinger, trust guarantees the functioning of medicine as we experience it because "without trust, medicine will be nothing but a battlefield invaded by lawyers, politicians, bureaucrats, journalists, controllers, sophisticated consumers, and money-makers" (Mechanic and Schlesinger 1996: 1693–97).

In assisted reproduction, the role of trust as the necessary condition for treatment is specific for several reasons. Among other things, it is based on the nature of the treatment itself. The treatment neither leads to a visible or measurable improvement of health, nor to a removal of the pathology of the human body, but rather an overcoming of the barriers preventing the conception of the child. Patients undergo a long-term and financially, mentally and physically demanding process, the progress of which is very difficult to control; its (non-)success can be seen only after a long period of time and without any relation to traceable changes in the functioning of the body, but it can be seen clearly – in the form of a positive or negative pregnancy test. In the case of failure, it is necessary to repeat the whole process from the beginning and again undergo a long period of treatment and waiting. The selection of the clinical and treatment procedures is often in the hands of patients who invest substantial sums in their treatment, which is unusual in the Czech medical environment.[82] The commercial

[82] Nowadays, infertility treatment is provided both in state and private institutions and is partially covered by mandatory health insurance. Four "basic" in vitro fertilisation cycles,

form of treatment gives considerable scope for the activity of patients, who decide to whom they will entrust their money and their body; on the other hand, doctors in reproductive medicine are suspected of being guided by commercial interests more often than in other medical fields. Patient statements from research of couples being treated for infertility describe the course of treatment as full of uncertainty, distrust and a lack of information[83]:

> *The medical care is really presented as goods (…), you can pay for it a hundred times but there are no warranties… You cannot control everything, which is a problem for me because I make my decisions, but I won't be able to look into the microscopes… And as for the speculation on the Internet about doctors taking someone's eggs, having them cultivated for a long time, using some of them and claiming that the rest weren't developing and couldn't be frozen (…) ...There was a suspicion that the process was manipulated because they receive more money for a new cycle, rather than just from the transfer. So I decided I simply won't undergo this. I simply don't trust them; God knows if they used something (cultivated embryos in the uterus, ed.)... They might have counted them wrong on purpose to make us pay for the ICSI (…) ...In fact, it seemed to me they just squeeze money from you and God knows what actually happened.* (Patient, ART clinic)

The investment in treatment contrasts with the impossibility to assess or control its progress and its adequacy in relation to health. In one of the centres of assisted reproduction that I visited during the research, couples receiving treatment can watch a fast-motion documentary of embryo cultivation in a special room to get a greater sense of control over the situation, and to have fewer reasons to distrust the doctors. In another Czech centre of assisted reproduction, the couples are provided with a copy of a video recording and documentation of the embryo development.[84]

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without any additional pharmaceuticals or procedures, are covered for women under 39 and who are applying for the treatment with male partners (ART is not accessible to women without male partners), under the condition that a single embryo is transferred in the first two cycles. "Covered" cycles usually involve many additional payments; the cost of treatment paid for by the patient can be five times the amount of an average salary. The age limit for treatment paid for by the patient is 49. The age limit for treatment covered by insurance, and treatment paid for by the patients themselves, is determined only for women. Treatment is covered by the woman's health insurance, regardless of the cause of infertility.

[83] The research was conducted by the author and the statements are from 2009 (for the results of an analysis based on the research of patients see Slepičková 2010, Slepičková 2014).

[84] It is not clear, however, how the trust of the patients, i.e. the laypeople, in the fact that the material presents the recordings of their own embryos and the announced processes, and

The patients themselves see trust as crucial to the success of treatment since they are not able to control its progress.

> *One must believe that the doctors had done their best or chosen the procedure that seemed OK and meant well, and nature just didn't let it happen. That it didn't work out for some unexplainable or unexplained reasons.* (Patient, ART clinic)

Patients, therefore, need trust to be able to entrust themselves to a facility and doctors. Even the doctors themselves, as could be seen from the research interviews both with them and the patients, see trust as a key condition for the treatment, using mysterious processes inside the female body, processes prone to stress and emotional distress. Treatment provides scope for fatalism, miracles and other things between Heaven and Earth; it deals with the key elements of patient identity, such as masculinity, femininity and parenthood, and gives much scope for the emotional dimension of the relationship between the doctor and the patient. At the same time, the commercialization of this environment, the transformation of the treatment into "business", represents a risk to the trust between doctors and patients because the doctors' primary concern might be their own profits (Fugelli 2001).

The following chapter aims to explore trust in the way it is rhetorically dealt with by doctors working with patients in the treatment of infertility. It turns on the perspective in existing research of trust between the doctor and the patient, focusing mainly on the patient's perspective, and on quantitative data in identifying the factors that influence the trust between doctor and patient. The chapter focuses on the role attributed to trust and on how the role fits into more general medical concepts of the role of the patient and its place in the treatment. It is based primarily on interviews with doctors and other personnel at centres of assisted reproduction.

Trust and Late Modern Medicine

The emphasis put on the role of trust in the doctor-patient relationship fits well into the Parsonsian scheme of the asymmetrical relationship between the doctor as an actor, rationally applying his sovereignty over the treatment and disease, and the "submissive patient" (Parsons 1951). In this concept, the role of the doctor is based on his/her professional prestige, control of

nothing else, is guaranteed.

technical knowledge, and the dependence of the patient. The patient should be obedient and trust the doctor because he/she is unable to rationally assess his/her condition and treatment options. The relationship between the doctor and the patient, as results from Parsons' analysis, is compared to the relationship between the parent and the child (Cockerham 2009).

However, trust has been thought of as the basis for successful treatment even in contemporary or post-modern medicine, when patients are referred to as partners in the treatment, informed actors, and consumers who rationally make choices from a menu of medical services (Conrad 2007, Neuberger 2000). Although the descriptions of contemporary medicine refer to a decrease of trust in the institution in general, as well as to a disruption of the status of doctors as indisputable experts on the disease and treatment, many research findings show that the concept of patients as rational, calculating actors is too simplistic. It ignores the complexity and variability of their attitudes, emotions and needs, where trust in doctors has an indisputable role (Lupton 1997).[85]

If we analyse trust, it is necessary to separate its two dimensions: personal trust in an individual actor – the doctor – which has to be actively constituted; and social trust in a social institution, i.e. medicine (Fugelli 2001, Pearson and Raeke 2000). While trust in medicine, specifically in the systems of healthcare, is considered to be endangered by contemporary social changes, trust in the individual doctor has remained strong, according to research (Mechanic and Schlesinger 1996; Pearson and Raeke 2000). The signs of a declining trust in medicine include numerous complaints or legal actions against doctors, an increase of control over the medical profession's performance, the popularity of alternative medicine, media criticism of healthcare, and the "epidemic" of burnout syndrome among doctors (Fugelli 2001).

Various studies of trust deal with the components of trust or the factors contributing to it, with the help of some qualitative but mainly quantitative approaches.[86] The components of trust primarily include competence,

[85] Lupton (1997) suggests that laypeople may pursue both the ideal-type "consumerist" and the "passive patient" subject position simultaneously or variously, depending on the context. In their quantitative research, Deber et al. (2007) show how the patients' preference of autonomy changes according to the type of health problem and decision, and the patient's age and education. Despite the emphasis on consumerism in healthcare, only a minority of patients wants to be completely autonomous in their decision-making.

[86] The most widely used quantitative tools for measuring trust are Trust in Physician Scale, Primary Care Assessment Survey, and Patient Trust Scale (Pearson and Raeke 2000). According to previous research using these tools, trust most correlates with the patient's assessment of the doctor's communication skills, the level of interpersonal treatment, and how much the doctor knows the patient. Weak correlations with the long-term nature of

privacy and confidentiality, reliability, the doctor's ability to communicate, and compassion (Thom and Campbell 1997).

The research interest in trust in the relationship between doctor and patient is based on two assumptions – that trust in the relationship between the doctor and the patient belongs to professional ethics, and that it is meaningful. It is the core and defining characteristic of the medical profession (Hall 2001). It also has an important instrumental component: the research shows that if the patients trust the doctors, their willingness to follow the treatment regime increases (Safran et al. 1998). Thus, trust has a transferred effect on the success of treatment and, more generally, on the health condition of the patient (Pearson and Raeke 2000; Hall 2001). This concept of trust then creates a specific pressure – on the doctors who should inspire trust and should not disrupt it by their actions, and on the patients who should trust the doctor and should not disrupt the progress and success of treatment by their doubts and disobedience.

Trust in Doctors as a Necessary Condition of Treatment and an Instrument to Discipline Patients

Drawing on the field research, doctors working in assisted reproduction consider trust to be the basic condition for the success of the treatment. Pregnancy is presented as a reward for the trust and patience that patients put into the hands of experts.

> *I can be doing my best but a woman tells me "I don't believe you, you're not helping me, I'm not getting pregnant." It's really not happening. It's just a miracle.* (Dr Johnson, man, owner of a private ART clinic)

If a woman does not trust the doctors, she suspects them of improper behaviour, becomes stressed out, clings to the vision of pregnancy just around the corner ("grasps for it"), or tries to intervene actively in the treatment, and actually hinders its success. Stress and emotion, attributed to women, represent an "uncontrollable nature", the erratic and unpredictable feminine principle, which impedes the success of rationality and science.

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the relationship, providing preventive advice and financial access to treatment were found. In another study, trust in the physician correlates with the choice of the doctor, a longer relationship with the doctor, and trust in the organization providing care (Safran et al. 1998).

In reproduction in general, but especially in the treatment of infertility, the female body is perceived as poorly functioning and uncooperative (Throsby 2002). Its psychosomatic reactions are considered to be an obstacle to the success of efficient technologies (Malin 2003)[87]. The emphasis put on the psychological context of infertility blames the already overly stressed woman for this state, not the ineffective treatment, which is considered as such to be a significant source of the stress.

> *Those who get pregnant after 10 years of not being able to and who had already adopted… that's what I've always said, it's the biggest proof that the mind plays a significant role; but how to cut the head off and not to let it do damage… nobody knows.* (Dr Taylor, man, private ART clinic)

In the treatment process, doctors offer their expertise because, unlike patients, they have knowledge that can help. The patients should contribute with their trust and patience. The relationship between the doctor and the patient has to be complementary, but not as partners.

> *It would take greater devotion, (starting to paraphrase the patients:) "Yes, we have put our trust into the hands of experts, they will help us" (ending paraphrasing patients) and they can help most by listening to what we tell them and not stressing themselves (…). (Starting paraphrasing patients again) "Now that I've seen and read that folic acid can help me, I'll take folic acid. I didn't become pregnant because I wasn't given assisted hatching, but my neighbour did." (End of the paraphrase) This is an absolute disaster: How can they be so vulnerable to stress themselves?* (Dr Thomas, man, owner of a private ART clinic)

In contrast with the emphasis on the patient's trust as a necessary condition for treatment, there is an emphasis on the necessary incredulity of doctors; trust is then perceived as a one-sided affair:

[87] The stereotypical vision of the female as imperfect and the male as effective is evident in medical treatises on conception – an analysis of medical texts for professionals (van der Ploeg 2004) showed that the pathology of male and female bodies are not presented neutrally. As a problematic element in the treatment of infertility, female reproductive cells are exclusively described: the egg and its pellucid zone (egg surface, which is used for the selection of sperm and prevents fertilization by multiple sperm) are described as a natural element preventing the active role of sperm.

> *The doctors should not assume anything or act on the basis of their assumptions. They should stick to the facts. They should not pay much attention to what the patients say: they may be wrong, imagining things, or lie – at least some patients, I'm not saying all of them. More importantly, the doctors should stick to what they find out during examination, to objective facts.* (Dr Wright, man, private ART clinic)

Mistrust, the reluctance of the patient to be passive during the treatment, and her effort to control and influence the treatment, challenge the authority of the doctors, both figuratively and literally. Any initiative on the patient's side is something extra that complicates the work of the doctors and leads to ridiculous demands in addressing this type of patient. The doctors then have to filter this out and see the patient's effort to exert control as irrational and emotional behaviour. They (the doctors) cannot "take it personally".

> *The problem is that a lot of patients allow themselves to be manipulated by what they find out on the Internet or read, and then they come and complicate life for the doctors, because they want this and that and "why don't you have this, we read that it helps". The truth is different. This complicates life for us, but it is part of it… when you hoe a garden, you come across a stone, pick it up, throw it away or kick it. This is completely normal.* (Dr Thomas, man, owner of a private ART clinic)

> *The patient describes her experience (on the Internet, ed.), and it's terribly hard to recognize that her situation doesn't have to apply to others or that others might be in a completely different situation; it is a complex issue and the patients sometimes apply to themselves what they read in chat rooms.* (Dr Smith, man, private ART clinic)

The patient's questions, requirements and consumer approach disturb the aura of creating miracles and the image of doctors as extraordinary and infallible authorities controlling specific knowledge, because they have to cope with their own failure.[88] It disrupts the idea of the passive patient, and shows her as an arrogant consumer with unrealistic expectations and without the proper humility towards medicine in the eyes of doctors.

[88] Doctors' mistrust of the Internet as a mechanism of maintaining knowledge as the source of power (Foucault 1999) in the field of reproductive medicine was analysed by Speier in her research focusing on reproductive tourism (Speier n. d.).

The transformation of the position of the doctor and the patient is related to the specificity of infertility treatment which is not based on solving (or identifying) the problem, but rather on overcoming it. This increases the likelihood of conception, which, however, cannot be guaranteed.

> *Unfortunately, there is no humility anymore; doctors have lost their status that might make them special; the clients come in expecting to dictate to them; they act like in a supermarket where they want to buy something, they have the money, they give it to us, and we have to listen to what they want. And they have read everything; they know it all.* (Dr Williams, man, private ART clinic)

In the Czech context, moreover, treatment is partially, and in some cases fully, paid for by the patient – something which doctors (and patients) see as one of the reasons for the high expectations of patients, and for understanding treatment as a service guarantee.

In the eyes of doctors, high and unrealistic expectations of patients are combined with recklessness, related to postponing parenthood, attributed mainly to women. Women who want to have a child "immediately, if possible" after a long period of postponing parenthood, and are unable to understand that it "isn't a piece of cake", were mentioned as a typical group of patients by almost all the research participants. The current emphasis on individual responsibility for one's own health is also reflected in this case: since we can choose reproduction, non-reproduction is also seen as a matter of choice. Infertility as a diagnosis becomes individualized, and it is the women who "put off" conception for so long who are seen as the culprits of the situation (Greil 1991; Bell 2014).

These women are described as people who "suddenly remember", after they "already have everything", that "they would like to have a baby"; doctors associate their desire for parenthood with prior consumer aspirations and present it thus to them. According to doctors, these patients see medicine as an immediate and reliable service to fulfil their wishes. The doctor represents nature and reminds the patients of the lack of presumption required for these mysterious processes, and of the age limits for female reproduction. In addition, the reproduction age limits are communicated to patients through the treatment payment limits (health insurance covers only cycles up to 39 years of age, and the treatment of older women, 40 to 49 years of age, has to be paid for by the patient). The woman is the person guilty of disrupting the natural order, thinking that everything can be planned.

The failure to respect nature and its powerful representative – scientific knowledge – carries warnings and penalties, i.e. the risk of childlessness.

> *It should be explained that it's not so simple, that we cannot cheat nature by any means; we can only help it, but we still have to respect it. (…) Because if they (patients) respect nature, the examination and the treatment will be done with the knowledge that may be beneficial for them; if they don't respect it, they will certainly get nothing out of it.* (Dr Taylor, man, private ART clinic)

Doctors also point out that too much planning in reproduction is short-sighted. One of the participants in the research, an embryologist, blamed planned parenting as the reason for an increasing number of infertile couples, describing it as inappropriate human intervention in ideally functioning natural processes.

> *If it all (the right time for parenthood, ed.) comes down to our own decisions, then the line will be moved even further. Were it not for contraception, there wouldn't be the possibilities of planning, it would simply happen. And nature itself is the best at choosing the right time.* (Dr. Jones, woman, private ART clinic)

The category of women "postponing" parenthood partially overlaps with a category of women labelled as "difficult to communicate with". Doctors described them as "busy clients", "engineering types", "educated, emancipated, self-confident women", and "women with two surnames". They have difficulties arranging an examination time ("they think there will be somebody here for them on a Saturday night") and have high expectations for the treatment, and they ask for many explanations, trying to get as much information as possible, which makes them too self-confident and know-it-alls in the eyes of doctors. Just as emotions and related tensions in women are considered obstacles to successful treatment, for these women their pragmatism and rationality, associated with "planning" their own lives, are cited as a problem. Therefore, they are not only blamed for their excessive emotions, which affect their bodily functions, thus preventing modern technologies from working effectively, but also for their excessive pragmatism and rationality that prevents understanding and respect for the randomness of natural laws, thus representing a disruption of their feminine essence. The type of pragmatism desirable in treatment is radically different – it should be a form of reconciliation with the limited success of treatment.

> *It's difficult to explain to them that what they understand to be rational doesn't work in a rational way, because it's biology.* (Dr Williams, man, private ART clinic)

The reluctance to set up an appointment for an examination then raises doubts about a true interest in parenthood – if the women are really willing to sacrifice their previous lifestyle for parenting.

> *I think the fact that she's too busy is a red herring. She doesn't really want to do it. Yeah, one of those successful career women or whatever you call them… Childcare is actually a full-time job and they probably don't want to give up their relatively comfortable life.* (Dr Johnson, man, private ART clinic)

In medical and media discussions about infertility treatment, women are given a huge responsibility for reproduction and blamed for not reproducing (Zamykalová 2006). In the face of the treatment limitations and an often reluctantly cooperative partner (Slepičková 2010), the woman is forced to take the treatment into her own hands. On the other hand, she has to play the role of a patient well, to be a trusting, passive, self-sacrificing and obedient patient. A pragmatic and active woman who prefers her career ambitions to motherhood does not conform to the idea of a proper woman and appropriate mother-to-be (Malin 2003). Her attempt to make decisions on reproduction and influence the infertility treatment inevitably makes doctors reluctant to accept this assertive and consumerist attitude and to doubt the woman's decision. It is the doctors who, despite the difficulties, have to communicate the natural reproductive limits to these women. By presenting IVF technology as something that only "assists" the natural process, doctors naturalize the ART technology (Franklin 1995) and build human reproduction into an essentialised framework.

One can also work with trust instrumentally. When established in the early stages of treatment, trust can be a powerful tool that facilitates negotiation with the patient throughout the treatment process. For their interests, assisted reproduction clinics can use the trust established by complying with the initial wishes of the patients who might have requested a medically ineffective treatment.

> *The fish always stinks from the head down – from the owner of any facility – so in my experience, if we meet the patient halfway during the first treatment, we get to know each other and build trust. Then the patient is grateful when we suggest something medically correct even for the second time, and this trust holds*

> *for a long time in the course of the treatment. I have to admit that the conservative alternative procedures (the procedures the patient wants to start with) aren't profitable or lucrative. But we start with them and when the classic methods of assisted reproduction are needed, we use them on the basis of trust. We actually gain the patient's trust.* (Dr Williams, man, private ART clinic)

By accepting less lucrative procedures, the clinic makes the patient, the source of profit, grateful. Profit, however, is generated "on the basis of trust" and the favour of the patient which is less elusive than in other facilities, because the patient had experienced respect for their own wishes at the beginning of the treatment.

Conclusion: Trust as the Responsibility of a Female Patient

Debates about changes in the medical profession put different emphases on specific aspects of change, and attribute a varying degree of revolutionary character to it (Light and Levine 2001). However, there is agreement that since the mid-20th century, the so-called "golden age" of the medical profession has been coming to an end; the relationship between doctors and patients has been transformed, people have become more critical of medicine, and the autonomy and dominant position of medicine have been threatened. In addition, the post-modern ethos, with its scepticism regarding the success of science in solving problems, the popularity of alternative (New Age) medical practices, a shift in the orientation of medicine towards the treatment and prevention of chronic diseases, and the associated increase in patients' decision-making powers and responsibilities all contribute to this transformation (Reeder 1972). The increase in an educated population critical of doctors disrupts the asymmetry in the roles of doctor and patient. Doctors are less and less able to encompass the entire corpus of medical knowledge, while patients and their representatives are more and more able to present themselves as experts on specific diseases and treatments (Lupton 1997). The distrust of, and critical approach to, medicine as an institution together with the commercialization and the impact of patients, are increasing as well. Trust, however, remains crucial in the relationship between doctor and patient, and it is also studied as such.

The analysis of the interviews with doctors at assisted reproduction clinics has suggested a specific role of trust in this field of medicine, and

from the perspective of doctors. Trust is seen as necessary for the success of the treatment, and a trusting submission to doctors as a necessary part of the responsible patient's role. Doctors emphasize trust as part of the mysterious nature of conception, a necessary condition of the well-functioning of unresearchable and erratic natural processes, e.g. fertilization and the genesis of viable embryos. The responsibility for trust, as well as the responsibility for questioning the accuracy of medical procedures suggested by the doctors, is mainly in the hands of the patient. Mistrust creates stress in the female body, and may cause the failure of the treatment. In the medical discourse, trust is contrasted with the attributes of the patient as an actor and consumer of services, who responsibly chooses from a menu of services and enters into a dialogue with the doctor as a knowledgeable partner. Not to trust the doctors means not only to question their authority, but also to oppose the unpredictability of the natural laws governing both the patient and the doctor.

In infertility treatment, there is a clear gender dimension to this rhetorical dealing with trust because the subject of reproductive medicine is primarily female. Reproductive medicine, seemingly firmly anchored in scientific objectivity, and often presented as a revolutionary or miraculous cure for anyone in its praxis, works as a form of biopower as described by Foucault (1999). It is a reproduction-limiting, i.e. controlling, mechanism over the bodies and the reproductive capacities of citizens, primarily women. To write about the "female body" would be inaccurate, since medicine has a strong normative character and reigns not only over the bodies, but also over the negotiations and social roles of the actors – and women more than men. The woman's traditional responsibility for reproduction within the couple, but also within the population (Foucault 1999: 126), is thus reinforced, regardless of the actual causes of infertility.

In assisted reproduction clinics, there is a conflict between doctors as the representatives of a normalising institution, who pronounce the objections to the life choices, lifestyle and femininity of women, i.e. their typical patients – and the educated, economically well situated and successful women who often come to the clinics in their late thirties or early forties, trying to win their way as assertive and informed clients. Allegations of patients' inability to trust medicine, and the prophecy of their punishment, i.e. the failure to conceive, are a doctor's way of coping with the externalities of their profession, such as the loss of the knowledge monopoly that underpins their power (Foucault 1999), the loss of trust in scientific expertise as the integral part of the biopower (Foucault 2004), or the unpredictability of the natural processes, of the guarantees, imitation

or improvement which the patients ask for, and which they expect from their doctors – who offer it. The search for causes of infertility in a lack of trust is a typical example of a "blame the victim" attitude (Franklin 1995). Through its disinterest in the social relations of the diagnosis or prevention, medicine personalizes the diagnosis and the "guilt" for it (Lupton 2003). A patient whom medicine cannot help is presented as unable to succumb to the treatment or as irresponsible in relation to one's own health (Zola 1972).

In this chapter, we analysed the rhetorical role of "trust" through which medicine strengthens the inevitability of the female condition, normalizes the role of the woman and the patient, stresses the essential "submission" to the laws of nature, the arbitrators of which are the doctors, and punishes those who defy the prescribed role with their active approach, who focus on their career, or keep their maiden names after marriage. The "clinging" by doctors to the submission and trust of their patients, in the Parsonsian sense, is a reaction to their professional sense of risk, as well as a specific manifestation of the ways in which reproductive medicine normalizes (the feminine) part of contemporary society, exercises control over the quality of reproduction, lays down, informally and unofficially, the boundaries of fertility and infertility, and decides who should, may, or may not become a biological parent, and how. Bodies and minds that are not willing to be disciplined by the medical profession in the form of the preferred female patient and approved mother-to-be are associated with the troublemakers and women that are "too much" – too old, too independent, too emancipated, too career-oriented. However, the prophesied punishment – childlessness – is clearly visible and indisputable and deprives the women who are not feminine enough for the key aspect of femininity, which is motherhood.

CHAPTER SEVEN

Medical Childbirth[89] Made in the Czech Republic: Required and Desired Practices

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A vast majority of childbirths (99.8%) take place in health facilities and are supervised by medical doctors in the Czech Republic (ÚZIS 2013: 19-20).[90] The report on "Mother and Newborn 2012" refers to the growing trend where childbirth is performed under the control of a physician/obstetrician (80.2%) as opposed to midwives (18.9%, ÚZIS 2013: 19 and Table 2.26.2, p. 87). As for the place of birth, only 245 children, out of the 107,430 children born in 2012 in the Czech Republic, were born outside of hospital (ÚZIS 2013: 20 and 24). The report presents the data as a downward trend in the number of births outside of hospital, presenting such events generally as accidents, which is supported by the high proportion of premature births among them (Ibid.). It is generally understood in the Czech Republic that giving birth in a hospital is one of the top accomplishments of late modern health care. The event is highly medicalised, using routine interventions as precautions (risk prevention) and is generally presented as the active management of labour.

At the same time, this top ranking care became an object of a harsh criticism in the topical public debate. This chapter picks upon the significant topics and arguments raised in the debate: a missing patient/women-oriented approach in the medical treatment of birth and lack of choice regarding the course (as well as place) of birth. Doctors are often presented or themselves take up the role in these medial debates as defenders of the status quo. Thus, the first part of the chapter analyses the atmosphere and context brought about in public debates in which medical doctors perform their profession. It is followed by an analysis of standpoints, attitudes and contextualisations provided by the interviewed medical doctors themselves on their everyday experiences and their potential vision of the desired and required practices

[89] Throughout the chapter, I deliberately use the term childbirth instead of delivery even though the research explores the medical doctors' contextualisation of the event. I understand childbirth as a broader set of events and approaches beyond the biomedical one. See Winnick and her argumentation concerning the language of birth for a more detailed legitimisation (Winnick 2004).

[90] As of March 8, 2015, the latest data on births published by the respective authority, the Institute of Health Information and Statistics of the Czech Republic (ÚZIS), reports only on the year 2012 (Mother and Newborn 2012, ÚZIS 2013).

at childbirth in the Czech Republic. This chapter concentrates then on the relevant aspects of the hospital setting of childbirth as it is reflected by the physicians themselves. The core arguments that focus the analysis evolve from the question: **What is the medical doctors' view and legitimisation of the current practices of childbirth in the Czech Republic?** By doing so, the text aims to answer the more general research question posed by this book: How are the borders between normality/legitimacy in the definitions of health and illness negotiated within the specialized field of reproductive medicine? On the basis of these questions, the chapter questions the nature and type of rationality (governmentality) that administers, controls, labels and creates particular situations, actors or bodies in relation to the contexts of childbirth. It outlines the character of Czech practices at childbirth through concepts of biopolitics and biopower and analyses their current particular manifestations. These are among other things the hegemony of biomedicine and its gendered character.

Firstly, it is important to briefly note the context under which health care is provided and organized in the Czech Republic, to help understand some phenomena associated with hospital birth and the hegemony of obstetrics (obstetricians) over it. General health care is covered by the national healthcare system and insurance here. Its transformation after the breakdown of the Soviet regime involved the processes of privatization, liberalisation as well as the commercialization and (de)professionalization of care. On the one hand, Czech citizens are still entitled to general medical care provided free of charge,[91] while on the other, the system is very paternalistic.

Childbirth is in a rather specific situation in this respect. Birth is presented by biomedicine as a state of emergency and high risk. Therefore, it is medicalised and dealt with as such: i.e. intervene to prevent risk. Medicalisation, technologisation (and rationalisation) and the distribution of the norm of "safeguarding" are the representatives of a classic form of biopower as described by Foucault (Foucault 1999). The issue of whether childbirth is an illness or a liminal experience that is a part of the normal human biography is a consequence of the struggle over the power over bodies, definitions or the institutionalised understandings of illness. It is the negotiation of who has the legitimate authoritative knowledge to define the norm and who does not that forms a line in the sand for latent conflict regarding the (health) care attributed to it, both in the Czech context and

[91] This does not apply to foreigners (even employed permanent residents who have special exemptions in their health insurance policies, and childbirth is typically one of them), and some criticism has been raised towards the Czech state officials pointing out these inequalities.

elsewhere. Its bordering position means that childbirth is caught in the crossfire of heated ideological debates. Moreover, analytically, the approach to this issue, grounded in social science, involves considerations of power relations in respect to several criteria, such as authoritative (expert) knowledge or the dominant gender order (inequality) to name but two of them.

The Spectre of Homebirth in the Czech Childbirth Debate and Beyond

The only legitimate place of birth is a maternity hospital in the Czech Republic, and the only person responsible for "delivering" babies is the medical doctor – the physician. These two phenomena frame the event as it is presented in the media, and it is supplemented by a more or less expert discussion on the negotiations and evaluation of the legitimate role of midwifes, a profession seriously suppressed in the past, as well as the role of other health or otherwise-involved professionals that is only very secondary. In the Czech context, midwifery as a profession had been ruled out by the former regime. Therefore, its rehabilitation is a very slow process. It involves anxieties about whose position is where, who should have the primary responsibility, as well as a bigger share of the deserved glory. Sometimes the process gets mixed up with the movement for natural childbirth which is a parallel but not necessarily overlapping civic initiative. Midwives are building their reputation with education attained in a system similar to medical doctors (offered at the same schools and taught by the same teachers), which complicates even more their expected role as assistants in the physiological childbirth process.[92] The professional hierarchy at medical schools intervenes into the emancipation process that also has its gender perspective. The process of professionalization as well as the professional authority of midwives is a part of the debate on structural change of the Czech health care system, which reflects both the necessity for sharing the workload (economically) among medical and health care professionals, and some kind of resistance to giving up the dominant position of Czech gynaecologists and obstetricians in delivery rooms. In

[92] Jana Pokorná (Pokorná 2013) has explored the context of the profession of Czech midwives in more detail in her Master's Thesis: "The legitimisation of the concept of the natural childbirth from the point of view of midwives". She specifically targeted the opposing attitudes and negotiations of midwives to the non-interventionist approach to childbirth and the (interventionist) hospital routines they are themselves often an integral part of.

international standards, the Czech Republic is the country with the highest number of physicians in this specialisation,[93] so they are rightly worried about losing their jobs (OECD 2013).

Power issues are not confined to debate amongst the professional experts on the role of physicians and midwives on birth issues. A similar line can also be traced in the more general public debate, where much harsh criticism has been articulated. Strong voices can be heard from civic society, especially from women's NGOs and informal initiatives that are opposed, often rather strongly, by representatives of the medical profession. The well-established and protected hegemonic position of biomedical knowledge as uncontested authoritative knowledge (Jordan 1997; Davis-Floyd and Sargent 1997) in this field is enjoying its position in public discourse, in contrast to the advocates of the human rights of choice. Thus, the voices of the former are received with undoubted public authority. Such debates are often polluted by misinterpretations and misunderstandings on both sides, or even negligence and ignorance. The typical trait of these debates, and the momentum of "a point of no return" in such argumentation, involves the issue of a homebirth.

Homebirths are not forbidden by Czech law, despite the de facto situation of hospitals being the sole place for childbirth. It is the procedural setting that makes homebirth and the necessary health-care provision (including the work of independent midwives) illegal. No health professional can legally attend to a homebirth (nor offer continual care during a pregnancy with childbirth as its climax). It is a potentially approving attitude to homebirths that provides the spark to any debate on Czech practices concerning childbirth. It is used as a guise to discredit the opposing party in a debate, narrowing down the demands of civic women's initiatives for structural change to "such an extreme and crazy wish". The approval or otherwise of homebirth also provides physicians themselves with a unifying critical benchmark of professional loyalty (or heresy). In line with the Foucauldian concept of biopower and the biopolitics of the population

[93] There are 49.5 gynaecologists and obstetricians in CZ per 100,000 women, similarly also in Greece (49.3) and their numbers have been rising over the last 10 years. The average number in OECD34 is 27.3 specialists in this profession, with New Zealand (14.5) and Canada (14.9) ranking on the opposite side of the spectrum. As far as midwives are concerned, the highest numbers are in Iceland (157.1 per 100,000) and Sweden (148.5) and the lowest in Canada (5.7) and Korea (4.7). The Czech Republic scores 83.7, still above the OECD34 average of 69.9 (OECD 2013, 68). These gross numbers definitely reflect the systems of national health care organization as well as various cultural traditions and country geographical specifics. It is questionable, though, whether these numbers, where CZ rank high in numbers of medical staff, also provide evidence for the level of advancement in medical care or health care provision.

(Foucault 1990; Foucault 2004) introduced in the opening chapter of this book, arguments used in the debate legitimize such a stance following the line of the "sake of the health and life" of the mother and, in particular, the child – the newborn citizen. The newborn child is an analytically notable category, as they are claimed to be the property of the state, thus they gain "biological citizenship" (Rose 2007). The power negotiations among the involved professions thus involve the power over the symbolic realm by defining citizens.

Such settings have brought about legal action from the side of dissatisfied patients. Several lawsuits have been taken to confront the hegemonic paternalist biomedical approach defending the status quo of a fully-equipped hospital as the sole legitimate place of birth[94] and more generally to point to the treatment received in hospitals at childbirth, which neglects the wishes and plans of birthing women and is legitimized by the interventionist biomedical approach. Two cases, one demanding professional assistance at homebirth (filed by two Czech women) and the other allowing a woman to leave hospital directly after the birth and not three to four days later, which is the required hospitalisation period here, have even made it to the European Court for Human Rights in Strasbourg. Such cases were rather exceptional for the Court portfolio. At the same time it demonstrates the lack of will or skill on the side of the Czech state representatives to moderate the debate on the national scene and take any action in dismantling the medical monopoly and rigidity in the Czech system of health care provision at childbirth. It also indicates strong bonds between the representatives of the state (at the Ministry of Health) and the representatives of the dominating obstetrical approach, as I will point out again later. The spectre of homebirths as it appears in topical debates, and its biased overgeneralised use as convenient proof legitimising a refusal to make any fundamental change in the Czech practice of childbirth, makes it difficult to start a serious debate or make any consequent change here. Its effect is nevertheless appalling.

A number of the civic initiatives, NGOs and women's organisations in fact do not advocate primarily for homebirth as such. However, their arguments are misheard and the red flag of homebirths is conveniently used by their opponents. Moreover, any physician advocating for or changing the "lege artis" (following the "law of the art", i.e. medical interventions performed

[94] The situation is also rather complex due to specific legal regulations of the independent midwifery profession ordained to provide a fully-equipped delivery room if they want to legally assist at a birth outside regular hospitals. Thus the competition also involved the professional dominance over childbirth.

in the proper way) is immediately exposed to the serious threat of being excommunicated from the professional community of sound experts. Thus the particular position of the medical professionals in this debate and their balancing on the edge deserves analytical attention. The power imbalance is a significant issue of the debate especially as the childbirth controversy regularly fuelling media coverage channels the topical debate on practices at childbirth into the simplified "homebirths: yes or no" polarised stands, no matter what the original opening theme was.

The demands articulated by advocates for change in the standard practices of childbirth, a specific segment of mostly (highly-educated, professional, often urban) women, receive harsh reactions coming from the respected and powerful body of medical knowledge representatives or bodies that represent their standpoint (civil service, ministries). Such resistance in standpoints is legitimized by the statistics, thus documenting the power of biopolitics of the population once again (Foucault 2004) and governmentality as means for the rational governance of population (Foucault 2004, Dean 2010). The statistical evidence is demonstrated and interpreted in such a way that the Czech Republic is one of the highest-ranked countries in the international standards in measures of neonatal mortality and morbidity, with the ranking of the country well above the average in charts showing the standards for fighting maternal complications. References to such biostatistics are presented in these debates as proof of the satisfactory status quo.

These issues lead us back to presenting the role of the key players in Czech obstetrics and the situation of late modern (bio)medicine. As we have pointed out in the opening chapter, the representation of biomedicine as omnipotent has reached its limits. Analyses critically assess the iatrogenic effects of medicalisation (Illich 1976) processes inherent to human life – even in its segment dealing with human reproduction – and critically reflect ethical boundaries of technological advancements. In its particular relationship to the practices of childbirth, Czech public discourse is penetrated by arguments coming from competing sets of expert knowledge in this field. The (as yet little contested) authoritative knowledge of the dominating biomedical (interventionist) practice is becoming increasingly confronted with the parallel ideology and practice represented by the midwifery or birth-assisting approach (Jordan 1997; Davis-Floyd and Sargent 1997). A debate is in the air on the (medical) interventionist management of childbirth in contrast to the birth-assisting approach, also reflecting the new consumer-based trend of more interventions (Hrešanová and Hasmanová Marhánková 2008). Among the influential key players that

guard the interventionist status quo of Czech childbirth practices, there are insurance companies and the industrial partners of the pharmaceutical and technological branches involved in the medical instruments and apparatuses market. They impose managerial and marketing (as well as often undeclared ethical) tasks upon medical specialists in decision-making positions, as these are still often occupied by doctors themselves. It further complicates their impartiality concerning the interventionist or restrained approaches to childbirth.

This contextual info provides the background evidence for further elaborating the attitudes and practices of the individual actors, i.e. the medical professionals dealing with childbirth and relevant affairs on an everyday routine basis. Far from questioning the important role of late modern biomedicine in solving health-related difficulties, the issue at stake relates particularly to the actions taken to prevent or overcome hardships routinely. This provides a more complex perspective on the issue of rigidity or the general unwillingness to change the status quo. The Czech public debate on childbirth, illuminating the spectre of homebirths as its dominant axis together with the hegemony of biomedical knowledge and its representatives in the debate, serves to open a more disciplined and rigorous analysis on the desired and required childbirth and of the positions of medical experts in it. Thus, the currently one-sidedness of the eventual picture may be supported and challenged by an analysis of interview accounts provided by the obstetricians themselves.[95] It reveals, as I suggest, that the arguments are much more heterogeneous on the side of biomedical experts. Moreover, the complexity of controversies raised by both sides, medical professionals and civic initiatives, is also much more compatible with the two sides than initially imagined. Thus, I am going to problematize the doctors' part in this ideologically-loaded debate. The target of the exploration is their **negotiations of the borders and limits to the desired and required childbirth**, and to identify the arguments used by these particular key actors in the process.[96] An interesting aspect

[95] Another valuable perspective is of course the one provided by recipients of care. However, this is not the subject of this text.

[96] The dominant method of data collection was in-depth interviews with obstetricians and gynaecologists with long years of (state) hospital practice.Most of them are still working there in senior positions, although some of them have left for private sector. Fifteen (15) senior Czech obstetricians and gynaecologists (both men and women) were interviewed, some of the interviews involved repeated meetings. Interviews were transcribedverbatim, making up more than 550 transcribed pages excluding fieldnotes. Further data included supplementary interviews with other actors and stakeholdersinvolved (midwives, doulas, lawyers, recipients of care, activists) and field notes (or digital recordings) from thematic events such as the public or semi-public speeches of medical doctors.

of the assessment of everyday hospital routine has gradually opened in the interviews, as these were face-to-face and held in private. Some fieldwork data comes from attending public topical speeches, and recordings of them where available.[97] The rhetoric used in public differed significantly from the accounts of the very same people when encountered in private interview. These public fora were mostly arenas for expressing loyalty with the biomedical norm and distancing themselves clearly from other approaches advocating more radical change in the practice. Such change would involve an ideological turn towards a more child-assisting, women-friendly non-interventionist birthing model. The analysis presented below thematises these segments of the strata of opinion employed by the medical doctors – from approval through guarded criticism to suggestions of a serious restructuring of the status quo – and point out some structural factors impeding easy change.

Doctors as Advocates of the Status Quo?

The study presented in this chapter is based on accounts coming from medical doctors, the obstetricians. One of the driving factors behind the research interviews was to find out what their attitude was towards the current hospital practice of childbirth that they play an active and hegemonic role in. As already indicated, their private narratives problematize the uniform standpoint of hegemonic, monolithic "medical opinion" present in the media coverage or public talks. What arguments do they use, what is the rhetoric they employ, what is their view of the practices and how do they justify the current status quo? I have interviewed women and men obstetricians working (or having worked for a long time) in maternity wards/hospitals (university clinics as well as local hospitals) in large cities

[97] These were: two national conferences of the Czech Ob-Gyn Society (in 2012 and 2014), a film documentary "Birth Plan",two university-based panel discussions: the Masaryk Debates: "Hospital as the sole safe place for childbirth/delivery", and a thematic discussion symposium organised by our project team: Medicine of Reproduction/Reproduction of Medicine, then a seminar organized in the Czech Parliament: "Home births - a step forward or backward", a roundtable discussion organized in a venture between NGOs and the university organized as a part of the program of "The week of respect to birth" with an invited keynote speech by Michel Odent, a well-known and respected international medical expert on natural birth, and a transcript of audio track from an independent documentary film "The Birth Plan". A detailed analysis of the debate "Hospital as the sole safe place for childbirth/delivery", is now also available as a students' diploma thesis supervised by the author (Daniela Rendl: Moc nad porodem – Power over Childbirth, Rendl 2013).

as well as small towns in the Czech Republic. The objective of the study was not to offer representative, quantifiable findings. Rather, the aim was to grasp the spectrum of opinions and approaches from the various sizes of hospital and professional positions of physicians involved in childbirth.

The gradual process of the interview itself also brings a relevant and significant observation, over and above its contents that form the standard focus of analytical attention. The initial general and unanimated reaction of the participants of the research interviews to my questions on the state of the professional practice and potential areas for desired change was similar to those known from the public arena: the practice is just fine, standing on solid systematic foundations with a long and high-quality tradition. No fundamental change is needed, according to them, other than with finances. Research participants also generally confirmed the mainstream resistance to and professional distance from homebirths. Moreover, they have eagerly anticipated the nodding of the researcher's head in response to their standpoint.

By proclaiming such formula, they have demonstrated loyalty and compliance with the dominant professional biomedical authorities (authoritative knowledge) in their respective specialisation. In the course of the interview process, doctors kept returning to the issue repeatedly, adding ever more new suggestions for transformations often ending up with an elaborated litany on the current state of affairs. I interpret this both as part of establishing the interviewee-researcher relationship, and as allowing themselves to be immersed in the problem under study, which then causes them to literally fire off about not only their personal but also their professional hardships. However, their attitudes varied with regard to the organization of hospital birth. These concerned the hospital routine (i.e. the division of labour among the professions involved, especially midwifes), competencies or authority delegated to women in labour and their "birth plans", as well as a more general approach to the conservative (reserved) or active (interventionist) management of the birthing process itself. In the interview process, reflections of everyday practices are revealed that enable analytical insight into the delicate techniques of governmentality (Foucault 1999) and negotiating or maintaining authoritative knowledge (Davis-Floyd and Sargent 1997, Winnick 2004, Hrešanová 2014).

Nevertheless, the aim of the study is rather to explain and provide a reasonable understanding of their attitudes and strategies in their everyday practices than to advocate implementing particular improvements. How do the representatives of the profession position themselves in the context of desired or required childbirth? Do they, and how do they

reflect upon allegations of passivity or even active denial in introducing more patient-(birthing women-)friendly practices, or for delegating more responsibilities to midwives trained in handling physiological birth? And how do they justify such stance? Or what are the obstacles, in their view, for introducing such change? The analysis refers to the normative expectations associated with the medical profession and its dominant representatives in the Czech context – obstetricians and gynaecologists. It points to interactions based on the unquestioned biomedical expert knowledge and its downplayed alternatives. It thematises problems on the organisation of hospital routine including the doctor–patient relationships or physicians' intense involvement in organizing the national healthcare system and care provision. And finally, it addresses, in a very suggestive way, the strong evaluation-loaded context in public debates on the practices of Czech childbirth with regard to doctors.

It is the negotiation of the norm of the required and desired childbirth that is on-going in the Czech context, i.e. the process of normalisation, where the issues of appropriation (Cahill 2001, Reiger 2008), hegemony, or enhancement are involved. As conceptualised by Foucault (1999, 2007), the analysis of efforts to normalise Czech childbirth reveal the norm, as a foundational element of biopower and governmentality. This means there is a slipping edge between the individual side of biopower (situations of actors) and the structural perspective of the population, and its health status (biomedicine as an institution, the organisation of hospital care).

What is Enough for a Change? The Building and the Atmosphere

Several head doctors[98] of maternity wards have provided me with lengthy stories of their personal fight for materially better working conditions and proudly walked me through their newly-refurbished and equipped wards. These men referred to significant progress in the provision of care, demonstrated in the material equipment and pastel-painted walls, in comparison to the uniform and often shabby past before 1989. Now as they have the nicely-decorated delivery rooms, and have refined their working environment often wrestled out in complex negotiations with the hospital management, some consider it enough. From the point of view of these ward heads, things have already "visibly" changed for birthing women.

[98] Head doctor is „primář" in Czech (they could be referred to as senior consultants, too), whereas a unit head is „vedoucí lékař".

Their approach indicates a very particular effort, involving work beyond their expert specialization and professional skill. Moreover, it is gendered in a specific way, indicating men's instrumentality and excluding the interpersonal relationships or the expressive functions of the working space, as will be indicated below, in the most elementary Parsonian sense (Parsons 1951). This change that they have worked hard for is easy to demonstrate. Such ground-breaking improvements serve as evidence for (in the case of my research study) the manly enthusiasm for construction. Moreover, it provides a feeling of accomplishment deserving praise that reassures them of their positions associated with prestige and the perks of the job, as well as the masculine air of victory. The only female representative in a position of an obstetrical unit head (a senior position just below head doctors in the hospital hierarchy) in my research study, Dr Pearl,[99] adds a somewhat stereotypical complementary view on the issue. She points out and stresses the importance of team spirit, mutual trust and good relationships among the personnel and improvements in the approach of hospital staff in general to the birthing women as her accomplishments in changing the practices of Czech childbirth in her particular hospital maternity unit. For Dr Pearl, it was important how people feel and identify with the local practice that formed her confidence in a positive transformation. This adds to the perspective of the importance of the establishment of trust in the doctor-patient relationship analysed in the previous chapters. Her account follows the same lines as yet another senior obstetrician, Dr Snowdrop, who challenges her university clinic practice of communication with patients as being at her own risk – in bending protocol at the expense of her own time.

Nevertheless this essentialising association of women with relationships[100] and men with construction is not necessarily applicable in every context. Neither does the practice exist only in this dual form. Rather pragmatically, for example, one head doctor, Dr White, delegated significant responsibilities to midwives in his maternity hospital in order to prevent misunderstandings resulting from a lack of communication. This approach, in his view, prevents legal action in cases when things go wrong and backs up his otherwise conservative (in contrast to interventionist) approach to childbirth management respecting the demand of some birthing women.[101] Such an approach makes Dr White an ally to them and an advocate for

[99] All the names used in the chapter are nicknames.

[100] In her recent text, Ema Hrešanová points to the lack of communication as the key obstacle for women giving birth in their evaluation of birth experiences as satisfying ones (Hrešanová 2014).

[101] I have written in detail on this particular case in the article "Power challenges for head doctors in maternity hospitals: beyond hegemonic masculinities" (Šmídová 2015b in print).

change. Dr White, a long-time head doctor in a local maternity hospital, points out:

> *All of these (misunderstandings and mistakes being taken to court – ed.) can be blamed on us to a certain extent, since we had practically no communication with the patient. She did not trust us – one did not know what the other did, one doctor came after another providing contradictory information, and the patient got lost in it. It is easier to follow this strategy in general practices than in hospitals, but I still consider this approach to be the most pragmatic for our defence. It means that we communicate with the patient, inform her even of our mistakes and apologize, clarify and explain the complications encountered and keep them involved and motivated to solve the situation and make the wrongs right again. This is the key thing in my opinion.* (Dr White, man, head doctor at a regional maternity hospital)

However, his approach reproduces gender relations in a slightly different pattern. Their hospital arrangement is more women-friendly and reflects the demands of a specific subgroup of informed recipients of care. On the other hand, it is the professional hierarchy that remains the guardian of the gendered division of tasks, leaving the expert interventions up to medical doctors, and communication with patients, including the establishment of time consuming and emotional relationships, for midwifes. As noted earlier, the midwifery profession is understood as extremely secondary in the Czech hospital hierarchy,[102] and due to its feminised status, it perpetuates essentialising rather than approaching the legitimate division of labour tasks professionally.

The material aspects of change, the new and refurbished buildings, were nevertheless stressed often as the key sign of improving care provided for women in labour, highlighting the positive trends in transforming Czech health care after 1989. Other aspects of change, such as the relationships with the personnel and patients involved were mostly excluded or often even trivialized by the men as representatives of the decision-making

[102] The profession of midwifery was basically abolished in the regime before 1989, with most of the tasks transferred either to nurses (then with a secondary school level of education) or to physicians themselves. Both the professions, nurses and midwives, require a university level of education now. Nevertheless, partly as a remnant of the past system, their formalized professional status is not recognized in a less hierarchical partnership with doctors.

positions in the hospital hierarchy.[103] Therefore, there remains a significant gender and power aspect left for further exploration, as these were either women in senior positions or men in "peripheral" locations who strived for such change.

Consequently, we can again elaborate on the question whether the physicians in senior positions are the key actors impeding changes? Are these powerful figures the strong guardians of the status quo or how can we understand their position? In order to disentangle this complex situation, some specifics of the socialization process in the medical profession and the everyday practice of the profession itself should be taken into consideration.

Everyday Hospital Work Requirements in Hospital Practice

Medicine as a profession, a prestigious occupation, is much formalized with a strict hierarchical order in work organizations. Moreover, the training takes a long time, which adds to its respect and formal recognition. Doctors (candidates) work extremely long and hard to become and remain members of such a system (profession). On the other hand, the system of healthcare and the structure of particular organizations such as hospitals is both complex and rather rigid. Hospitals are formal organizations with strict hierarchies, while also being strongly gendered, as Acker's attributes of a gendered organization would easily apply to them (Acker 1990). They also operate in the broader social context of the politics of the state, inclining to neo-liberal solutions to multi-layered health-related phenomena such as institutionalized care at childbirth. The biopolitics of the state with its specifics is embedded in the organization and in evaluating everyday required hospital practice. Particular aspects of governmentality, with the role of doctors as advocates or the normality declared by state officials (Foucault 1999, 2010; Slepičková, Šlesingerová and Šmídová 2012) are inherent counterparts of the everyday hospital routine. Moreover, as mentioned before and rather interestingly for the Czech context, medical doctors are very influential actors on the level of both state administration and politics. They are frequent and successful candidates in being elected to deputy and executive political bodies in addition to various state administration and ministerial executive committees. Thus, in hospitals

[103] The issue of the power to decide is a rather complex one in the medical profession. I will elaborate more on this issue in relation to men and masculinities in the chapter "Condemned to Rule: Masculine Domination and the Hegemonic Masculinities of Doctors in Maternity Wards" (Šmídová 2015a in print).

they often perform the will of their own profession represented in the country's politics.

The organizational setting of a hospital itself is nevertheless strongly hierarchical and the distribution of power puts clear hegemony to the biomedical standard. The processes of biomedicalisation (Clarke et al. 2003) are involved and the only representatives of the hegemonic profession enhance them. This forms the basis for their normative and generally conservative (or elitist) approach to changes in the Czech system of perinatal care. This is caused especially by the combination of medicine and politics in the multiple life trajectories of individual doctors, and by the social process when the pastoral power of the ruler has passed on to biomedicine (Foucault 1973). Moreover, doctors in general have a strong incentive in sustaining the status quo in the established and passed-down professional hierarchy. Nevertheless, the legitimacy of such a position is contested and the question of the medical appropriation of childbirth (Cahill 2001) has been raised publicly.

Medical performance in hospitals is bound by multiple regulations and conditions. There is the "point" system for individual medical performance acts, the list of which regulates how much (or little or not at all) the hospital gets paid for particular practices. Then, there are professional bodies regulating the hospital routine procedures by specific guidelines and their assessment. These are the core for the "lege artis", approved and recommended procedures, for the performance in the specialization. Unfortunately, these guidelines are taken as an obligation rather too often. Moreover they are also used as a precaution or even an alibi, in order to avoid any potential legal consequences if the event turns out badly or a formal complaint is filed.

Guarded criticism can even be heard from within the profession itself, but more often, it seems, shadow practices germinate in local environments avoiding open confrontation. These were the above-mentioned cases of the practices of Dr Snowdrop (privately investing in the doctor–patient relationship) or Dr White (redistributing his ward work tasks of the personnel to enable a better midwife-patient relationship and thus bring benefits to the organization as such). All these practices have been done with the awareness of transgressing the protocol or even "lege artis" procedures.

This whole system of compliance and conformity, which is at the same time a professional necessity, is then sealed by particular hospital rules and practices under the supervision of individual senior doctors in the position of heads of clinics or wards. This point in the hierarchical system of biomedical care at childbirth has turned out to be surprisingly important

and flexible in the interview accounts of the participants of this study. There are workplaces strictly adhering to the nationally-set guidelines (authorized by the national professional society ČGPS), which are often big clinics, whose teams in fact keep establishing the standards themselves. Moreover, there are workplaces further from the centre of research at university clinics and big cities where deviations from the mainstream policies can be encountered.

On the one hand, there is the conformity of university clinics bound by their proximity to the centre of production of the scientific advancements, and the regional (town) hospitals somewhat aside from the central surveillance allowing for less strict conformity to the guidelines. On the other hand, there seems to be a trend of resistance depending on whether the ward head has international or other external experience. Their experience in working abroad was likely to positively challenge the practice performed then locally, especially if it was acquired in the neighbouring democracies. Furthermore, for example when their experience was acquired in the global South (humanitarian missions etc.), this may have prompted them in bringing the issue of human rights seriously into question.[104] Another form of distance gained from and critical reflection on one's own professional performance could arise from personal experience as a patient. Such experiences challenge the typical setting for governmentality creating usable, convenient subjects, situations and institutions (Dean 2010).

Yet, there is one more significant perspective that divides representatives of the medical profession in the assessment of current practice, and that is the gender of the practitioners. It was women professionals interviewed, unlike the men, who have raised their critical voices in evaluating the status quo and advocated for the need for a systematic, structural change. Men-doctors, usually the ward heads and board members of these professional organisations setting the rules, defend the status quo. Furthermore, as a product of the process of socialisation in the profession, gender hierarchies and specific organisational gender orders keep reproducing the status quo of "boys in white" (Becker et al. 1977). The manifest dual gender axis forms incentives for resistance or for compliance with the status quo that offers its patriarchal dividend derived from membership of the boys club (Connell

[104] There was a contrasting moment, though, as some, somewhat older doctors have used such reference in a more conservative direction. They have pointed out the advancement and high standards of the Czech medical care in contrast to the living conditions in the respective countries of the global south. This has served them in legitimising the status quo and in presenting their surprise at the discontent expressed by Czech recipients of care.

1995). These power relationships do not concern only the doctor-patient relationship, they also penetrate the professional hierarchy.

Senior women doctors have repeatedly pointed out that the mix of gender and professional rivalries formed the setting of everyday hospital interactions, while describing the difficulties they had when socialising in the profession. Among other aspects when entering the exclusive club, there is the strict junior-senior divide. Sometimes these two axes, gender and professional seniority, intersect with hierarchies between the professions involved.[105]

Kereen Reiger (Reiger 2008) has analysed the professional rivalry between obstetricians and midwives. She points out that besides the ideological clash between medicalised and child-assisting childbirth (with the hegemony of the former), the professions of midwives and obstetricians are also in fact fighting for their share of glory over successful childbirth. This aspect of the dispute has its gender dimension as well. Nevertheless, both players engage in a very hard fight according to Reiger. She describes this fight as wrestling to see who will become the knight in bright shiny armour riding a white horse announcing the birth (safe delivery) of a child (Reiger 2008).

The gender order of hospitals channels women and men into different segments of hospital work as well as hierarchy. Moreover, their performance is judged on almost opposing criteria, especially extra functional ones. Dr Daisy, working in a clinic more than 10 years, describes her first days in the profession:

> *When I signed on as a graduate, (…) two thirds were men doctors and a third of us were women doctors, and the men really made it into the operating room, while we stood in the corner (…). There is always like the chief of the clinic, several men doctors, who decide what to do; (…) and I think that men really, really had aprivilege, that they really started to put us women more in the out-patient office. (…) Well, it's a little bit, that ‚these girls' – most of the women doctors, are whooshed to the ambulance, because they are like more meticulous, hardworking, they can withstand the routine of seeing one patient after another and type it up (…) whereas these guys don't have much patience, and they just try more to get into surgery. Well, (…) I think they*

[105] These aspects have been elaborated in detail in two other texts based on the analysis of data collected in this research study: "Power challenges for head doctors in maternity hospitals: beyond hegemonic masculinities" (Šmídová 2015b in print) and "Condemned to Rule: Masculine Domination and the Hegemonic Masculinities of Doctors in Maternity Wards" (Šmídová 2015a in print).

> *have an easier time of it.* (Dr Daisy, woman, senior doctor in a university clinic)

Another senior woman doctor now working in a private practice has pointed out on account of the gendered treatment of junior doctors:

> *In health care professions especially, it follows this line: a woman doctor is judged by the looks of her boss, the looks of her male colleagues, and, even, by her female colleagues, and three times the attention is by the looks of the mid-level health personnel. They actually hate young women doctors…especially nurses/midwives. Whereas the same nurses go crazy about men doctors.* (Dr Swan, woman, senior doctor, owner of a private practice in a city)

All these instances contribute to the everyday conditions that make doctors reflect or stay blind to the reproduction of inequalities and maltreatment of colleagues or patients. Thus, it is the environment of the organization of a hospital itself that stimulates or impedes the doctors' potential activeness for change in the practice of childbirth. Regardless of their personal practice, interview partners referred to feeling like the cogs in a machine – helpless – in the system of the medical profession and hospital hierarchy that was so formalised, strict and bound by multiple regulations. In addition, the hospital routine was repeatedly described as organized along army lines with manners and discipline as an unquestionable attribute of everyday conduct. In fact, discipline was strictly required while the work itself was demanding – both physically and psychologically. Dr Pearl worked as a ward head in a faculty hospital before she left for a private practice. She explicitly uses this comparison:

> *You need training, and make it really hard (to survive in the profession – ed.), and this is probably where the perpetuated, strict required hierarchy comes from, together with the army-like treatment. In fact, towards the junior colleagues, it sometimes borders on all the bad phenomena encountered in military service.* (Dr Pearl, woman, senior doctor in a private ART clinic)

Physicians deal with matters of life and death on an everyday basis and work extremely long shifts, including intense night work – as, in comparison to most other medical specialisations, child births are longer-term processes and often take place at night, making an overnight duty

followed by a regular day shift a source of exhaustion. This was described in more analytical detail in Chapter 5: Medicine as Reproduced Powerlessness: Everyday Life in Czech Reproductive Medicine from the Physicians' Point of View.

Two more aspects of the organisation of hospital life will be dealt in yet more detail in this chapter. These are the aspects of "size matters", grasping the size of the hospital and its proximity to the centre of power, and the "authoritarian touch", pointing out the accidentality of particular ward arrangements depending on the personality at its head. Both of these factors have a quite significant influence on legitimising the status quo of Czech hospital childbirth or advocating change.

Legitimisation and Critique of the Status Quo

The status quo is justified by obstetricians in the research interviews by referring to recipients of care (patients) benefiting from an excellent system of birth care established a long time ago that is enviable in many other countries.[106] Suggestions for potential modest modifications of the system lay in reflecting on the recent political and social policy changes based on the transformation process of the post-communist condition resulting in the financial difficulties in sustaining it. Thus, most of the faults of the current practice have been attributed to external sources or factors, as they were presented, such as massive privatization or corruption, or self-assertive patients. They have also pointed to the growing gap between practices in large research hospitals and smaller local ones. Here the limits of the practice are formed by the centre–periphery measurement as regards the accessibility and conformity to sources of authority (guidelines) as well as cash flow (solvency of the clients/patients of private practices). At the same time, the demands on the birthing women reflect the urban area variable and differ in the capital and big cities compared to other regions. Different sets of challenges are presented there by the differing working conditions and organizational structures in the respective hospitals.

The main arguments for legitimising the status quo included the rhetoric of safety and eliminating or even preventing risk. This corresponds with the process of the biomedicalisation of health analysed by the team of Adele Clarke (Clarke et al. 2003), with the historical justification of the process

[106] Their arguments follow the biopolitical line of measuring the population, indexing neonatal or maternal morbidities and mortalities, international scores of the Czech Republic in various rates and charts.

of appropriating childbirth by (masculine in her text) medicine described by Heather Cahill (Cahill 2001) and in alliance with the negotiations between the medicalised "language of birth" of Terri Winnick (Winnick 2004). Little credit is given to the iatrogenic effects of the medicalised, interventionist routine, in the first instance. These are claimed by opponents of interventionist biomedical childbirth to form a significant proportion of the complications, considering that childbirth is originally a physiological process marking the end of yet another physiological process – pregnancy.

The stress on precautions and risk prevention is still driven by another set of factors articulated in the Czech context. These are marked by the aforementioned forensic impact if things go wrong and the sequence of events accompanying medical care at childbirth diverges from the "lege artis" guidelines interpreted as rules of conduct. The doctors often refer to the danger of being taken to court for their mistakes, which is a new experience compared to past practice. Even in the current practice, those who work at big clinics are backed and protected by the apparatus of the profession and the structure of the clinic as such. Avoiding risk and a stress put on safety are examples of fundamental manifestations of biopolitical governmentality (Foucault 1999, Dean 2010). Only rather exceptionally do court cases end up punishing individual physicians (the dominating, authoritative profession). This is in contrast to the stigmatised recipients of care who demand a "risky birth plan" or representatives of other professions involved, such as independent midwives in particular.

Another motive for routine interventionist childbirth was described by the interviewees as a lack of experience with the physiological course of childbirth, which closely correlates with impatience (embedded in the organisation of hospital care) with the time-consuming process of birth. This often has a spiral effect. Arguments that are unquestionably efficient in the process of persuading the audience for medical interventions literally use examples of horror, blood and death and refer to patients (women in the case of childbirth) who refuse to accept the routine procedures offered as irresponsible, hormonally-misbalanced beings who are not capable of their own judgement and who put the health of their child and themselves at risk.[107] Their interpretive twist is interesting here, as, despite the doctors' lack of expertize concerning physiological birth, they turn this disadvantage into a marketing strategy. They concentrate their rhetoric on

[107] See for example the passage of the documentaryfilm "The Birth Plan" presenting Dr Záhumenský referring to "buckets of blood" lost from a massive postpartum haemorrhage (bleeding immediately following birth) and his judgement of mothers opting for home birth or a birth plan refusing certain routine interventions.

a highly unlikely course of events and stress the probability that things will go terribly wrong, thus requiring their interventions, even those to prevent such situations. In the meantime, the opponents of such an approach are then to blame for fatalities, presented as a proof of the biomedical truth.

Size Matters: It is also important, regarding the arguments raised in the doctors' speeches, what working environment they work in. As regards the size of hospital, there are specific differences between the leading clinics and smaller local hospitals. Surprisingly, in the local hospitals, some heads of the obstetrical departments appeared more open to changes. This is, in their view, also due to the current practical arrangement of the whole health care system leaving the sole responsibility for the maternity ward in small hospitals to the ward head doctors. Such a structure, adding the stress and potential risks brought about by their sole responsibility may as well bind their representatives even more to comply with the lege artis. Nevertheless, and still far from claiming this is the prevailing practice in Czech small-sized hospitals. The setting of smaller hospitals is less hierarchical, formal, career-oriented and complex in its structure. Moreover, it is on the edges of the sight of biomedical power concentrated in the cutting-edge centres. The local head doctors cannot rely on any bigger institutions or affiliated departments and specialized units available in big clinics, where consultation or delegation of responsibility is at hand and thus they are prone to invent their own strategies. Dr Plaster, a long-time head doctor in a local maternity hospital, notes:

> *You know, lately, I am with one foot in jail all the time. (…) When this happens in an ambulance, they just dial the emergency number, and the woman is escorted here. Here, when something goes wrong, it needs to be resolved in 99% of all cases. Only about 1% can be transferred elsewhere, to a higher sort of a hospital. Well, sometimes this is a kind of – this is simply how it is.* (Dr Plaster, man, head doctor in a local maternity hospital)

This has brought some of them into a paradoxical practice.In contrast to the usually strict domination of the biomedical approach licenced to medical personnel, they are seeking allies among the birthing women and among midwives advocating for a more alternative course of hospital birth eliminating routine interventions (as described earlier in the chapter).

Authoritorian Touch: Rather surprisingly for such a formalised profession, job satisfaction is strongly influenced by the atmosphere of the workplace, which in turn is based on interpersonal relationships. The boss and his

(as these are frequently men) "school" form a stimulating environment or cement the rigidity of the working conditions. This especially affects wards in big clinics where the fluctuation of personnel is rather high and which serve as training institutions for medics and graduates of medical faculties. In a representative survey conducted as a part of this research project,[108] junior doctors in particular are the most disillusioned segment of the medical doctors' workforce. The issue of seniority and junior status in the medical profession thus form another relevant aspect of the hospital hierarchy reflected in the willingness and openness to change. Newcomers might want to bring new approaches, but these can be quashed from the very beginning. In a hospital hierarchy where the "gifted hands" and skill based on experience form the most valued expertise, fresh graduates score very low in this respect. This is strengthened by the fact that at this point they are in the lowest ranks of the medical hierarchy itself. The particular setting of the hospital hierarchy and stratified relationships among the staff thus channel the potential improvements (or simply changes) strongly by reproducing its formal as well as informal inequalities.

Concluding Remarks on the Structural Context of the Doctors' Standpoints

The analysis has so far concentrated rather on contextualising the incentives and inevitability of the required practices. The desired ones have been implied by keeping up to the standards of safety, yet providing more room for patients' initiative, provided the mastering of the recesses of the profession that allows for a noninterventionist approach to childbirth in the hospital setting. Nevertheless,the presentation of the spectrum of attitudes and opinions presented by doctors, and the organizational structure of their working environment with its formal and informal protocols, offers an alternative picture to the uniform model presented in the media as "the doctors' view en bloc". It includes plurality, heterogeneity within the profession, the complexity of hierarchies and power structures, issues of age and professional seniority, gender relations at the workplace as well as interprofessional relations there, the distance or proximity to the centre of political and professional power and the size and profile of the organization itself. The attitudes encompass the reproduction of myths about the

[108] This study was published in detail in the article *Attitudes of Physicians to the Czech Medicine and to Challenges in Reproductive Medicine* (Slepičková and Šmídová 2014) and we refer to it in Chapter Five of this book.

"alternatives": the spectre of home births; the danger associated with independent midwives;and the stories of blood, risk and horror uttered to warn from deviating from (bio)medicalised routine practice.

On the structural level the interviews have disclosed the significant aspect of individualisation, which is inherent in the organisation of medical care. The combination of gifted hands, local traditions and "school" practiced and required by local authorities (ward heads) may have a much stronger impact on the particular hospital practice than the formal guidelines and regulations issued and reconfirmed at thevarious professional events of the professional society. The convenient option of compliance to these regulations is thus challenged in certain contexts, and the local bosses deliberately step out of the crowd and take on the risk associated with potential accusations of professional disloyalty or lack of professional back-up in the event of problems. Since "it is all about the people" (local "schools") regarding heresy to routine arrangements, it plays an important role as well in the (re)production of the interpersonal relations in the respective wards. Some environments are highly competitive and hostile, others build their image on close interpersonal relations and responsiveness to individual needs in their professional as well as life trajectories. Such an environment seems to proliferate with women in leading positions or more generally with bosses respecting and recognizing the professional status of the (feminised) profession of midwives and who respect the autonomy and subjectivity of patients (birthing women).

Often, there is a darker side to the long-term personal endeavour of the local bosses, or the hostile environment for the team members. These are the individual experiences of „cogs in the machine", when reflecting upon the futility of making a significant change to the system as a whole. The everyday routine was described in terms that "this is not the life for everyone", as hospital life makes you drill, discipline yourselves, leads to frustration, exhaustion, and the resulting reasonable pay is a reward for totally unreasonable working conditions and demands. The reward, built into the profession of medicine from its very beginnings, lying in the status and prestige of the heroes praised for bringing newborn babies to life, and for medical doctors' unquestioned capability for miraculous recoveries only adds, in many respects, to their problematized status.This becomes evident when things go wrong, when these unrealistic expectations are not met (and the threat of law suits is omnipresent in the background). Moreover, patient obedience and loyalty have vanished in the Czech context with the arrival of a democratic environment, various civic society initiatives and widespread access to relevant information. The process of growing self-

confidence and the articulated demands from particular patients indicate a confidence in the knowledge people have and this affects the changing demands, i.e. its more stratified distribution, for care provision also in reproductive issues such as birth.

Their problems in everyday practice come also from the reported daily organization of their work. It causes the feelings that there is no way out as most doctors have experienced the power games within the guild itself, e.g. the army-like hierarchies and practices such as the bullying and sexism that the analysis has illustrated. They work in the context of intense institutional hierarchy and bureaucracy. Moreover, the management of hospitals as well as their ward heads are targeted by the influence of the pharmaceutical industry and health insurance rules. The more general social processes of deprofessionalization and the commodification of health and illness are increasingly challenging their practices. This clashes with the relatively comfortable life under the umbrella of the institutionalized status quo, comprised of conformity, in-crowd loyalty and also hiding mistakes.

The concluding remarks to this chapter are therefore not straightforward. Senior medical doctors in positions of power (well situated in the medical hierarchy) have their share on reproducing the status quo. Thus the question is whether it is the doctors to blame for the rigid practices of Czech childbirth. Some responsibility must fall on their shoulders as well as on organizationally-loyal, young, ambitious colleagues who work hard to internalize the existing structures and comply with them. This would be neither surprising nor specific for the medical profession as such. The picture becomes more relevant when targeting our analytical attention on those doctors who refused to conform to the "norm". Some of them leave the profession (or hospital), others carry on despite their frustrations and some articulate them more or less publicly. All these practices contribute to negotiating the norm, the process of normalising the desired and required childbirth in the biomedicalised setting of maternity hospitals and have their share in reproducing the existing governmentality, in particular the means of rational governance of the population (Foucault 2004, Dean 2010).

There are certain niches for change despite the robustness of the structures protected by the big wheels of the specialisation. What is yet to be surmounted is the divide between private conversations and complaints, local initiatives (often on the geographical edges of the specialisation or in organisations not recognized as cutting-edge research clinics) and the public loyalty performed at status-reconfirming events such as the annual national conference of the specialisation and other professional forums.

The privately- and locally-shared conviction that change is needed in the organisation of hospital work and healthcare related to childbirth, so far stands in striking contrast to the reluctance in articulating such criticism publicly. It is partly the result of the hierarchical power structures embedded in the organisation of medical care and profession as such. Furthermore, there is very strong peer pressure, involving a professional culture of obedience, loyalty, compliance and silence or even silencing. Any departure from these standards puts their proponents at high risk of sanction. Moreover, it is interpreted as a lack of gratitude for the knowledge and expertise that has been attained by participating in the system (of medical education, apprenticeship and further qualification). The danger of being labelled as disloyal or even heretic lies, among other facts, in the easy association often made (manipulated towards) that the alternative (in the singular) is being represented as being in favour of home births. As if there is any agreement among both proponents and opponents of the systematic change of Czech practices around (hospital, medicalised) childbirth, it is the denial of the legitimacy of home births. Thus, the risk related to being labelled a defender of home births is in fact nothing less than putting one's professionality seriously at stake and being excluded. This is a serious and significant impediment for opening up a serious public and professional debate.

This chapter opened with a commentary on the polarised Czech debate diverted or side-tracked to a unifying refusal of homebirth. At the same time, the senior representatives of the profession acknowledge the fact that the system cannot continue in the same way. The current context indicates that there is a strong need for mediating the debate, as it seems that the parties involved have difficulties discussing the issues at stake without biased antagonisms.[109] These barricaded positions are even strengthened by further legal action taken in defence of the impaired actors on the basis of human rights. Such initiatives are irritating to the representatives of the

[109] Several attempts have been made to establish a working group under the auspices of the Czech Ministry of Health. The first one included representatives of all the actors involved: medical doctors, midwives, nurses, recipients of care, insurance companies as well as ministerial/state officials and independent experts. This group was dissolved shortly after its 2nd/3rd meeting (from very authoritative positions, despite relevant arguments that the parties involved were not capable of dialogue) and a new one was established leaving independent midwives and recipients of care outside (Source LLP 2013: http://llp.cz/2013/04/ministerstvo-zdravotnictvi-necekane-vyloucilo-z-diskuze-o-koncepci-porodnictvi-zastupkyne-rodicek-a-porodnich-asistentek/). Recently, a new thematic working group was assembled in late 2014 under the Czech Governmental Office and its Board for Equal Opportunities for Women and Men. The author of this chapter is its member and looks forward to seeing its progress.

status quo, who are utilising power structures working behind the scenes (benefiting – even economically – from their dominant position and using their own political, cultural and social capital in reproducing it). Besides the big cogs in the organisation of medical care around childbirth and their opponents from outside the profession, there are scattered but strong critical voices from within the profession. There is an articulated need from the side of doctors to challenge their frustration resulting from the clashing demands as well as from the unbearable organisation of hospital work regarding childbirth, and the lack of associated educational opportunities. Publicly admitting problems associated with the interventionist approach to childbirth also puts the medical halo as well as working positions in danger. Moreover, the publicized imagery of individual medical heroes "fighting high-risk events and conquering death" would also be challenged. Such a step requires courage and energy, commodities that medical doctors employ in their everyday professional routine regularly. Bringing the desired and required childbirth practices closer to each other requires a shift of the existing initiatives from private to public, from local to central, from the disempowered towards the central positions of power in the profession. This would be helpful for the problem at stake, while being useful and empowering for the exhausted pioneers in the profession and other actorsinvolved. It seems currently rather unlikely.

CHAPTER EIGHT
Conclusion: Contemporary Challenges in Czech Reproductive Biomedicine

Eva Šlesingerová, Lenka Slepičková, Iva Šmídová

Czech reproductive biomedicine is the bearer of the legacy of modernism, with its admiration for figures, technology, and science. It is also part of the late-modern deep social and cultural transformations that establish biosocieties or biosociality, as described by Paul Rabinow (Rabinow 1996). These transformations are not revolutionary; they are rather the product of the intensification of power that is inscribed in the very foundations of modernity/the modern society. The power is biopower, which names, creates and controls life at the level of populations as well as at an individual level. Our research that has been introduced in this book has reflected the changes in the original form of biopower and biopolitics, as defined by Foucault (1973, 2004, etc.) and Lemke (2011). Specifically, we have followed the concept of biopower by Rabinow and Rose (2006), who build on the original concept of biopower and describe its current manifestations mainly in three areas: reproductive medicine, genetics, and the idea of race. In contemporary Czech reproductive medicine, however, we can also analyse the manifestations of new forms of biopower, as described by Herbert Gottweis (2005), who refers to the pressure on individualisation, the personal responsibility of patients, the molecularization of dealing with human tissue, human tissue bio-value and disembodiment.

A number of analyses have recently been published in social sciences, dealing with a variety of issues and areas where these changes are manifested. Examples include the transformation of the doctor-patient relationship, the possibilities and commercialization of new biotechnologies, the power position of biomedicine both in treatment and the public space and the so-called new eugenics aimed at improving the body at the cellular level. These topics have emerged in our own analyses as key topics in the perception of contemporary medicine by a number of actors, i.e. medical professionals, midwives, laboratory technicians, scientists, clients, patients.

The institution of biomedicine, its scientific ethos, and the medical profession face the challenge to uphold their authority and hegemony in reproduction at a time of profound changes affecting its social image and specific approach to patients/clients (Light, Levine 1988; Annandale 1998; Conrad 2007; Cockerham 2009). Biomedicine is forced to cope not

only with the new and growing demands of the patients, but also with new ethical dilemmas and issues, the solutions (or discussion) of which are often overtaken by its progress. The tendency of medicine to defend its power is enhanced by its structural restrictions, e.g. in the form of the formal external control of treatment andthe "supervision" of medical practices in media cases and litigation (Annandale 1998). The analysis of how biomedicine maintains its hegemony specifically in reproduction, of the nature of its normality and power and of how trust is established and maintained in biomedicine was at the core of our research.

In Czech reproductive medicine, normative pressures are manifested in many aspects, e.g. in the aggression towards the opponents or supporters of alternatives or in the formal and informal definitions of good and healthy bodies (starting with embryos), appropriate and desirable parents, etc. Their particular forms and examples have been described in previous chapters. Normality, the production of standards within biomedicine, is reflected in the fundamental context of how we define health and illness, the normal and the pathological, etc. (Canguilhem 1988). Normality and health also work hand in hand with the intersecting factors of status, gender and ethnicity. These manifestations of hegemony and biopower indicate the huge medicalisation of the life itself, i.e. the expansion of medical standards to even wider areas of life. On the one hand, reproductive medicine was part of the development that began in the 18th century, the threshold of modernity, when pastoral power shifted from the hands of priests to the hands of doctors (Foucault 1999), as did the claim to absolute power over the lives of patients and the population. This development was strengthened by the paternalistic way that medicine worked under the Czech State Socialism before 1989 functioning of medicine in socialism (Hrešanová, Hasmanová Marhánková 2008; Dudová 2012). On the other hand, doctors and scientists (embryologists, geneticists) face in their work a discord between the expectations of their roles, defined by the formally-established hierarchies and rules and the everyday reality, when they are confronted with their actual powerlessness in the face of the inevitability of illness and death or when they have to make decisions ad hoc without the support of binding ethical rules. The apparent autonomy of the profession is subject to many external limitations, including the economic pressure on the profit of medical facilities and the client attitude towards patients whose concept of treatment as a service and access to many information sources pose another threat (Conrad 2007; Cockerham 2009). Radical reactions to other forms of knowledge and the strengthening of available power resources are a response to the threat the medical professionals are faced with every

day. The reactions are driven by the rhetoric of normality, symbolized by the phrase "a healthy baby, a healthy mother", used by doctors to describe the objective of their efforts and the expectations of medicine. The idea of normality also legitimises their interventions in birth, conception and pregnancy in the spirit of the "reduction of abnormalities", whether it is the "foetus quality", the desirable course of treatment and the power hierarchy in the delivery room, or the proper performance of the feminine and motherly role by the patients asking for assisted reproduction (Malin 2003). Like elsewhere in the world (Rapp 2000; Kleinman 2006), medicine is becoming the judge and guardian of the normality and health of the Czech population, referring to the desire for healthy children and a healthy population. For example, in the process of prenatal testing, both pregnant women and geneticists and doctors by profession are faced with pressure not only during the examination, but also on the so-called therapeutic abortion of "unsuitable" foetuses or the so-called "selection" (a euphemism for elimination) of genetically-defective embryos. Down syndrome is often mentioned as the diagnosis which serves as the icon of danger.

The hegemony of biomedicine and doctors is based not only on the authority of the binding *lege artis* rules[110], whose boundaries are wide, but also on the claims of biomedicine as a scientific institution. The role of science is crucial because gynaecology, biology, embryology and molecular genetics produce the structures of the biopower management and administration of life that mediate the establishment of the authority of medicine and refer to them as such.

An integral part of the normalisation of biopower through reproductive medicine is the trust in medical expertise as a vital form of knowledge of the (late) modern era, i.e. trust in the professional knowledge of doctors and scientists, as well as trust as the foundation of the doctor-patient relationship. It is currently being built on new foundations which necessarily redefine the hierarchy of the relationship between the actors interacting in a number of ways. This often happens regardless of their particular wishes. The hegemonic role of expert medical knowledge is confronted with the patient's knowledge and demands. The consumer attitude of some patients, as well as their unquestioning or passive resignation as a contrasting attitude to some others, confronts the doctors with the question of how

[110] According to obstetricians, their job, i.e. medicine, is mainly a craft with the tradition of "skilful" and "golden hands" and the ability to decide and act quickly. In a way, this is actually an opposing notion to (general) medicine primarily understood as a set of theoretical expertise.

to communicate the limits of medicine and medical interventions that are expected to result in miracles.

Trust in biomedicine as such and in the specialist – an obstetrician, gynaecologist, embryologist or geneticist – is built and manifested at various levels. At the most general level, it is the trust in the expert system, the type of knowledge, the very essence of contemporary biomedicine is based on biopower understood as the management of population and citizens especially through science (Foucault 2004). On another level, trust is also reflected in the hierarchy in communication, in the pressure of accepting the medication procedure passively and in not negotiating. These can be manifested in the scientification and technologization, or in the use of incomprehensible language, which can be interpreted as symbolic violence (Bourdieu 1998).

In the Czech Republic, the doctor-patient relationship is significantly influenced not only by such symbolic negotiation but also by the current structure of work organization. The regime in maternity hospitals, as well as in gynaecological clinics (and presumably, in other areas of hospital medicine) often pushes the physical abilities of doctors to the limit. The necessity to endure exhausting work leads doctors to their interpretation of the work they do as a service for the public good and as a symptomatic addiction to the "adrenaline" situations in obstetrics and surgery preventing them from abandoning the routine. The internalized strict discipline is apparent, along with professional loyaltyand the undisputed respect for the authority of the direct superiors in the hospital environment. The confrontation of the exhausted body (and mind) of the doctor, whose professional autonomy is tied by the awareness of the risks of complaints or lawsuits, client requirements and expectations of patients, often leads to frustrating misunderstanding and conflicts. Despite the formalized rules governing the operation of hospitals and a number of other regulations, laws and decrees regulating medical care, the individual hospital departments work in a distinctive way, with autonomous "schools" of medical personalities in the roles of head doctors and senior consultants. Along with their attitudes to the team and professional skill, the emerging cohorts of junior doctors are also taught the value systems and action patterns for dealing with patients and other staff, including either the reproduction of inequalities and prejudices or an enlightened attitude to overcoming the dilemmas entailed in the contemporary setting of hospital care.

The pressures on the concept of biomedicine as the establisher of standards, trust in the expert system or the role of status and gender at

different planes and levels could be seen in the following three specific areas that have been analysed.

The analysis of childbirth practices has confirmed the assumption that obstetrics in the Czech environment is greatly diversified despite the seemingly unifying biomedical frame. At least, it is seen as such by the communication partners. The analysis of interviews revealed that there are several structural elements potentially challenging a professional career. A major influence on particular practices is played by the size and research or practical profiling of the maternity hospital, or by its location relative to the centre of power (Prague or a university city). The figure of a head doctor or senior consultant plays a significant role in specific organizational routines at the wards established by them, together with professional (and human) seniority, or the experience gained in other contexts (e.g. a contract abroad, reflection of alternative approaches in medicine, or personal experience in the role of a patient). A significant phenomenon in hospital practice is the organizational masculinity and rather conventional gender relations. On the one hand, these reproduce masculine hegemony. However, on the other hand, they make the head doctors find themselves in a kind of powerless situation where they feel like cogs in machinery that they cannot influence. This machinery involves not only the acceptance of the gender stereotypes about an (in)appropriate job or professional career, but also the status of the healthcare in the Czech Republic, the transformation of the healthcare system in general under the influence of the changing state policy, and the pushy med-pharma industry with its own economic interests.

The practices of Czech childbirth are limited not only by the defence mechanisms of the medical authority itself, but also by the system of health insurance payments for healthcare (and their distribution among the participating professions). There are also professional rivalries concerning competence and responsibility, while there is also a competition for limited resources (the threat of closing small maternity hospitals and the inbreeding in individual "professors' schools", teams and clans that reproduce the status quo and do not incorporate representatives of alternative authoritative knowledge). Limited resources are compensated by the interests of industrial partners, and the commercial product massage is part of everyday medical practice (see more in Šmídová 2015). This tangle of relationships has the lion's share in reproducing non-transparent and unfair practices in Czech gynaecology and obstetrics, often seen as an unreflected attribute of the existing system. In addition, such a practice has a very sensitive trigger mechanism because of the tense public debate about Czech obstetrics and

professional loyalty prompting the obligation to defend the honour of medical experts and complicity to the professional lege artis. Obstetrics as a currently exposed sub-area of reproductive medicine is caught in the crossfire of the biomedical interventionist attitude to liminal life events. It is also caught at an intersection of debates where various sets of expert knowledge clash. The analysis presented in this book has shown that doctors have to look for individual paths to cope with the dilemmas brought by their work. They create their own legitimation strategies, involving both loyalty to and professional conformity with the established hospital routines, and a distance from them. Despite the prevalent image of obstetricians as the dogs in the manger or as advocates of the status quo, the research interviews have revealed a wide range of attitudes. In particular, they have grasped the motivations and the very specific organisational and professional context forming the physicians' attitudes, which in fact resonate with the arguments coming from the opponents of Czech practices of childbirth in the public debate.

Eventually, the required and desired childbirth assumes contrasting forms even for obstetricians themselves, with years of experience. As we have already suggested, it is influenced by the organisation of hospital work, by the hierarchies of relations among and within the professions and also by a seemingly formally-established uniform procedure (in practice, the attitudes of the hospital wards differ with respect to the current leadership, rather than according to a more or less unifying national framework of healthcare). Another problem, causing the discontent of both the women at birth and the doctors and practitioners, is the exploitative system of hospital work. In comparison with private gynaecological facilities, the system was presented as inhuman and unsustainable. Moreover, doctors in the Czech context, unlike other "old" professions, do not have models for supervision, other institutions limiting the professional and human burnout or mechanisms correcting a disproportionate physical burden related to both the specialised work itself (births often take place at night and they take longer than a regular work shift; the surgery cannot be scheduled in normal working hours) and the standards of the organization of night duties and the consecutive shifts in working days. Even more specifically, there is no care or service available for the profession often facing liminal life-threatening conditions.

In **assisted reproduction**, the authority of biomedicine is maintained in several ways. One of them is the rhetorical emphasis on clinical intuition as a medical competence which can be acquired only by practice and which is, therefore, inaccessible to the lay people (as well as to novice doctors) (Lupton

2003). Another emphasis stresses the "unpredictability" and "fragility" of any conception process not subject to general and professional power and control. The doctor's role is the arbiter of natural laws and processes that cannot be intervened or resisted but can be imitated or improved by doctors. Nevertheless, it is then distorted, in the doctors' view, by unwanted interventions or a lack of humility in mainly female patients who want to "outsmart" both nature and the doctors and refuse to be at their mercy. The lack of "passivity" in women being treated and their reluctance to submit to the doctor and "respect the limits of nature" is punished by failure, because too much stress or clinging to the desire for a child are considered contradictory to a successful conception through assisted reproduction, regardless of the fact that the very process of treatment means a significant amount of stress and discomfort. "Blaming patients" is a significant trend in assisted reproduction and a way how medicine exercises its control or "remedy" of deviations not only in relation to the reproductive abilities of the human body, but also to gender, parental, civic and patient roles (Britt 1998, Malin 2003). Patients are either "blamed" for too much rationality or too much emotionality during the treatment.

Centres for assisted reproduction, forced to perform in a highly competitive environment, also have to find various ways of dealing with the patients' (dis)trust (often resulting from the awareness of the commercialization of this medical field) or with "trouble-makers" who are at the same time their paying customers. Despite being constrained by outer limits, the patients' awareness and the commercial interests of the facility, the power of doctors is still considerable since it influences the incomprehensible process – the ambiguously-defined sequence of decisions about the course of treatment – and it is applied in a field with a number of both formal and informal restrictions on the access to (successful) treatment.

As for the third subfield analysed in our book, **manipulation with embryos or DNA**, Czech reproductive medicine is also part of a broader trend of shaping late-modern bio-societies characterized by massive bio-technologization. The bio-political form of the idea of life as a privileged object of study of life sciences, reproduced mainly in the environment of biomedicine, has a much technologized form in the Czech Republic. There are about 35 IVF centres and other specialized university and commercial facilities. Czech reproductive biomedicine puts a special emphasis on the hi-tech technological treatment of the so-called bio-objects, i.e., embryos, stem cells or foetuses, as described by Vermeulen, Tamminen and Webster (2013) – but without any conceptual or sound public debate on the

bio-ethical issues generated in the context of bio-objectification processes. There is also an empirical experience of new forms of biopolitics here, characterized by the molecularization, disembodiment and the ambiguity of the borders of the life itself, the human or non-synthetic (Gottweis 2005). Life sciences, such as molecular biology, genetics, and embryology, belong to the process of bio-technologization and they have a very strong power position in the Czech Republic. On the one hand, science in its everyday practice is a leader of expert decision-making on how to define or treat various bio-objects (Rabinow 1996). On the other hand, its expert analysis is not fundamentally intertwined with the public space, whether in the negotiation and formation of Czech laws that govern the manipulation of stem cells or in the public debate in the media. Czech reproductive biomedicine and the cooperation of related life sciences operate in a social territory characterized by the normalisation strategy, i.e. by the effort for human enhancement. The new forms of eugenics are an integral part of efforts for healthy and normal populations and the modern scientific ethos, the power/knowledge, including not only the classification of the unhealthy and undesirable, e.g. in case of PGD or other prenatal diagnostics, but it also encompasses the normalisation and efforts to enhance both individual bodies and entire populations. This modernist idea of enhancement also reflects approaches to handling stem cells and on shifting the attention from reproductive medicine to regenerative medicine, its economizing, commercialization, and bio-value appreciation.

The aim of our book was to guide our readers through the process of our conceptual reflection and introduce specific contexts, i.e. the fieldwork data from the research, and to offer their interpretation. The issues addressed by Czech reproductive medicine are related to the bio-technologization of society, the economization and commercialization of medicine, and the transformation of the role of doctors, patients, midwives and scientists. New technological developments redefine the ways we can address social and cultural impacts of some older issues – for example, the question of the above-mentioned eugenics. We see eugenics and the eugenic type of rationality (as well as the idea of race) as an integral part of the core of our type of society. Conversely, some biomedical disciplines are learning to cope with the fact that the conservative attitude to the reproductive processes does not necessarily mean lagging behind technological advances, if used wisely and with respect to the wishes and values of the actors involved.

In our analyses, we have dealt mainly with the modernist legacy of medicine that is endangered by the late modern transformations of both the doctor's and the patient's power, and with the reactions of medical and

scientific professionals to this situation. Our data has revealed that the tensions between the traditional forms of modern biopolitics/biopower and its current late-modern manifestations do not necessarily only threaten the medical profession, they also comply with it in many respects. An example of such accord is the medical development of options for controlling the body and its reproductive capabilities (e.g. egg-freezing or pre-implantation genetic diagnosis) and, more generally, meeting the demand for risk control or quick fixes, or in an approach to the topic of "the quality of the population". The latter gains a new form not only in the context of the current debates about the low birth rate, ageing and dying-out of the Czech population, but also in relation to the new technologies of foetus selection or prenatal diagnostics. On the one hand, the presentation of the treatment as a service corresponding to the demand breaks the medical profession free from ethical claims; on the other hand, it transfers the burden and responsibility to individual choices of doctors and patients.

A whole range of important topics in the context of reproductive medicine have not found its place in this book. Some new issues emerged from our analysis as key topics that deserve more research attention in the future. One of them is the analysis of media and public debate statements, how important topics related to reproductive biomedicine are dealt with in the Czech public space, and how statistics are used as a tool of standardisation and for shaping of the average citizenship (Foucault 1990). In our book, we have only mentioned marginally the topic of education and socialisation onto the profession, i.e. the medical schools that are essential factors in the normalisation of the medical profession (Beagan 2000, Lupton 2003). The growing fragmentation of the Czech healthcare system would also deserve a deeper insight. The quality and supply of care in private facilities leads to increasing expectations from the recipients of the care, which can result in frustration or conflict when compared to the conditions in state institutions (for example, when giving birth). On the other hand, we can notice promising figures for active patients, demanding (care) in many respects, who are gradually abandoning the role of obedient and passive objects of medical care. They will also transform the field of Czech reproductive medicine and its games of life.

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SUMMARY

The *Games of Life* analyses current reproductive medicine in the Czech Republic. It targets biomedicine, as a concrete manifestation of modern society's normalization of the Western approach to human health and illness by focusing on three specific fields: childbirth, assisted reproduction, and embryo manipulation. All three themes are approached with the concept of biopower as a form of governance and administration of modern populations (Foucault 1999).

The objective of the book is to provide a critical sociological analysis of reproductive medicine, as one of the key poles in the current form of biopower (Rabinow, Rose 2003, 2006). The reason for our focus on this area is the relationship between reproductive medicine in the Czech Republic and technology, the commodification of health and illness, and the normative character of reproductive medicine with its consequences in the broader social context. The authors start by filling the gap in critical reflection and thelack of debate of these issues in the Czech professional context, and by understanding the mechanisms reproducing the hegemony of a biomedical approach to human reproduction beyond national borders. They do so in the *Games of Life* by providing specific fieldwork data from the Czech context. They focus their empirical analysis on the issues of everyday practice in reproductive medicine, such as establishing trust in the process, or on topics channelling and polarizing both professional and public discussions on transforming the practices of Czech hospital birth, or the debate on the status of the embryo as a bio-object.

These particular issues have been studied to answer the research questions: How are the borders between normality/legitimacy in the definitions of health and illness negotiated within three specialized fields of reproductive medicine? In what way is trust established within the system of modern reproductive medicine? How are the categories of status, gender, and ethnicity introduced into this process? The book analytically situates Czech reproductive biomedicine within a broader critical approach to biosociality manifested in profound changes in contemporary societies.

Key words

biopower, biomedicine, reproductive medicine, normalization, hegemony, medical profession, medicalization, gender, health, illness, childbirth, assisted reproduction, and embryo manipulation

SHRNUTÍ

Hry se životem: česká reprodukční biomedicína. Sociologické perspektivy

Kniha *Hry se životem* se zabývá současnou reprodukční medicínou v České republice. Vychází přitom z analýzy instituce biomedicíny jako konkrétního projevu normalizace moderní společnosti v rámci současného přístupu ke zdraví a nemoci. Zaměřuje se na tři specifické oblasti reprodukční medicíny: porody, asistovanou reprodukci a manipulaci s DNA a embryi. Všechna tato tři témata jsou rámována konceptem biomoci/biopolitiky jako specifické formy vlády a administrace moderních populací (Foucault 1999). Primárním cílem této knihy je sociologická analýza reprodukční medicíny jako jedné ze současných podob právě tohoto typu moci – biomoci (Rabinow, Rose 2003, 2006). Dalším cílem je kritická reflexe širších sociálních procesů souvisejících se vznikem a fungováním tzv. biosociality, podoby společností, kde se tzv. příroda stává předmětem kulturního vytváření a tzv. kultura se stává přirozenou (Rabinow 1996). Text nabízí také sociologickou analýzu vztahu mezi českou reprodukční medicínou a technologizací, komodifikací zdraví a nemoci a normativním charakterem reprodukční medicíny. Autorky knihy chtějí zaplnit mezeru v kritické reflexi těchto témat v českém kontextu a otevřít o nich debatu. Prostřednictvím analýzy dat z českého prostředí chtějí přispět k porozumění mechanismům, které reprodukují hegemonii biomedicínského přístupu k reprodukci, a to i mimo hranice ČR. Zaměřují se na témata každodenní praxe reprodukční medicíny, jako je ustavování důvěry, nebo na témata, která významně polarizují odbornou i veřejnou diskusi, jako je transformace českého porodnictví, nebo v ní zatím zcela absentují, jako je debata o statusu embrya. Cílem dílčích studií i konceptuálních textů je snaha odpovědět na obecnější otázky: Jak jsou udržovány hranice mezi normalitou/legitimitou a abnormalitou/nelegitimitou v rámci tří konkrétních polí reprodukční medicíny? Jakým způsobem je ustavována důvěra v systém moderní reprodukční medicíny? A jak do tohoto procesu vstupují kategorie genderu, statusu, etnicity?

Klíčová slova

biomoc, biopolitika, reprodukční medicína, normalizace, hegemonie, medicínská profese, medikalizace, gender, zdraví/nemoc, porod, asistovaná reprodukce, manipulace s embryi

NAME INDEX

INDEX

Games of Life

Czech Reproductive Biomedicine. Sociological Perspectives

Iva Šmídová, Eva Šlesingerová, Lenka Slepičková

Translation Barbora Hammondová (chapter 2) and
Sylva Ficová (chapters 3, 4, 5 and 8)
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The authors are sociologists working at the Faculty of Social Studies, Masaryk University, Brno, Czech Republic. IVA ŠMÍDOVÁ is an assistant professor at the Department of Sociology (Gender Studies Program). She specializes in the reproduction of gendered social structures and particularly in critical approaches to studying men and masculinities in her research. She explores the field of practices at childbirth in this book. EVA ŠLESINGEROVÁ is an assistant professor at the Department of Sociology (Social Anthropology Program). Her research and academic interests include anthropology of the body and medicine, genetics, biotechnologies, Czechness, and visual studies. She analyzes embryo and DNA manipulation and explores innovative conceptualizations of Czech reproductive medicine in this book. LENKA SLEPIČKOVÁ is a researcher at the Office for Population Studies and she also works at the Institute of Research in Inclusive Education. Her research interests include involuntary childlessness, infertility treatment, and inclusion in education. In this book, she focuses on the changing character of medical profession manifested in the role of trust in the process of infertility treatment.

BOOK REVIEWS:

RADKA DUDOVÁ: "The book Games of Life presents an excellent study in the contemporary Czech reproductive medicine, showing how biopower and biopolitics operate in and through this specific field of biomedicine. (...) The book builds on a strong background of theoretical literature as well as on thorough and well executed empirical research. Its conclusions are sound, innovative and sometimes surprising."

AMY SPEIER: "This work is a timely, pivotal examination of a current point in time in Czech reproductive medicine – ranging from embryonic stem cell research to fertility treatments to childbirth. The topics are wide ranging, but at the same time inextricably linked. (...) I found it compelling, fascinating, and timely."

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