I. Research objectives

The story started in 1978 when Patrick Steptoe and Robert Edwards announced briefly in „The Lancet” that after a long experimental period the world’s first successful test-tube baby Louise Brown was born. After the United Kingdom India was the second country in the world to produce a test-tube baby in the same year, and since then, millions of babies conceived by assisted reproductive technologies (ART) have reportedly been born throughout the world.

In vitro fertilisation (IVF) within assisted reproductive technologies has meant a landmark in the history of medicine and was a path-breaking answer to infertility. In retrospect, it is considered one of the most important medical advances of the 20th century. IVF has become rapidly the fact of life, and the development of that method provided a springboard for science to develop such new and highly controversial biotechnological phenomena as human embryonic stem cell research and human cloning.

The far-reaching rational, profane, individual and consumer-based ideologies also have a great influence not only on our traditional and collective ideas tied to marriage, family and motherhood, but such a modernism accompanied by human cloning might also have a devastating impact on our ideas about man.

What justifies that, for example in the United States, certain infertile couples are able to pay a great amount of money for a genetically perfect sperm and egg to donors, or to clinics for offering free sex-selection of future children, or to surrogate mothers? What accounts for sperm donor search on the internet where search can be made by a wide range of internal and external features of the perfect donors? Have we entered the cyberprocreation era? Moreover, accordingly some opinions, this may connect in the future to the possibilities of human genetics and to the perspectives of reproductive cloning which may provide alternatives to the presently applied reproductive technics or may complete them.

Human reproduction, parentage and family are objectives deeply rooted in traditions. These traditions have their origins in the nuclear family considered
the base of society in which procreation occurs naturally, but assisted reproductive technics and, what is more, the future aspects of human cloning lead us far away from this intimate structure of unaffected procreation. On the one side, we should be aware of infertile couple’s desire for a child who might be really a blessing for them, but, on the contrary, we should not supress the facts that science often claims for free embryo research, utilization and experimentation.

There are a lot of questions which need explanation, for example:

Can new technics in science lead us towards a paradigm shift? Where are the limits of permissible methods such as commercial based sperm or egg donation? And how could the law deal with happenings when this donor sperm or egg transmits a serious genetic disease to the offspring?

Is it to be wished that within the confines of a „baby-design”, we could choose the sex of our child, or maybe it’s genetic features with some embrionic interventions?

Surrogacy paralyses our image about birth-mother. Could parties agree about parental status by the means of a contract? Should surrogate be paid expences only or should it be allowed to pay her more for this „reproductive service”? What should happen when the surrogate is reluctant to give up the child, could the contract be executed under the law? Who drive the commerce of „baby-business” at all? And how could be adjudicated the emotional and immaterial facts in this field?

Furthermore, should parliaments give the green light for human embryonic stem cell research knowing that in the course of this process, myriad of embryos are discarded and destroyed? Do embryos in vitro represent human life? Should it be allowed to create human embryos in vitro not for reproduction, but for scientific experimentations? Are we playing God, with or without God’s wisdom?

The dissertation explores similar questions across the well-debated aspects of assisted reproduction and embryonic research.
II. Research methodology

Beyond the Hungarian legal regulation the dissertation analyses that of the United States, England and Germany. Each of these regulations provide a different approach which can be seen as a model concept.

(1) The reason to study the American model is that there are neither federal nor state legal provisions which would regulate the two field of assisted conception and embryonic research clearly and reassuringly. Therefore the regulation instrument is not so much the law as the market. There are mostly no legal restrictions and we can face several methods which would be inconcievable in Europe.

(2) The legal model in England is quite similar to the American, it is liberal and permissive, but it exists between strictly laid down statutory regulations and procedures, and thus without regard to the market. It allows several controversial methods, e.g. surrogacy or creating embryos for research purpose, but only under certain conditions and with statutory control. The characteristic features are centralisation and progression.

(3) The German model differs radically from the American and it shows similarities to the English concept only in the centralisation. German regulation takes into consideration the value of human life seriously, and the legal regime is engaged with the conventional idea that human life begins with conception. Consequently, the German system is restrictive and prohibitive.

The basic concept of the dissertation is that it firstly gives the legal background and framework of the examined countries in connection with assisted reproduction and embryonic research, and it follows the detailed discussion and evaluation of the legal regulation in the different areas of the topic. Meanwhile, the essay lays special emphasis upon the practical consequentions of certain incidents, and on the fact that extant legal definitions have often limited applications.
The research carried out in the dissertation took a few years, and at that time several library holdings, academic and professional journal databases supported the work.

**III. Brief summary of the dissertation and the research**

The dissertation is divided into three parts as follows:

Part I covers the medical, historical and ideological environment of ARTs. It provides background information to the different types of ARTs as well as their medical development and also to the early ethical and legal reactions in connection with them.

It is a fundamental fact of this topic that IVF gave the possibility to create human embryos outside the womb so it is reasonable to devote attention in one chapter to the status of the embryo in vitro generally, and to the theories accepting or denying it’s human nature and equal moral status. This moral and legal status will be analysed from a special point of view in subsequent chapters of the essay.

Likewise, Part I deals with the right to procreate in order to illustrate the atmosphere of ARTs. The right to procreate is present both in the field of ARTs used commonly and in the area of new biotechnological methods such as embryo manipulation and reproductive cloning.

Part II explores a comprehensive overview about the practice of assisted reproduction in the mirror of legal regulation. One chapter presents the legal environment of the examined countries by analyzing the following questions: which forms of ARTs are allowed; what are the conditions of egg, sperm and embryo donation; what kind of methods are used to select between donors or „super donors”; and in what way can be regulated the parental status in general. In the United States both of the federal and the state law regarding ART is predominantly inconsequential and contains spectacular gaps, while the
opposite is true in the examined European countries as their parliaments enacted detailed statutory regulations from the beginning.

One chapter deals with the well-published disputes related to the disposition of cryopreserved embryos. These cases, decisively in the United States, arise out of the marital dissolution of couples who underwent fertility treatment and cryopreserved surplus embryos for future implantation. Upon divorce the couples disagree what should be done with the frozen embryos. Courts have three way to adjust the question, on the one hand, they could weight the competing reproductive interests of the parties, on the other hand, they could give special attention to the former written agreement of the couple, and finally, courts can use their discretion to decide whether frozen embryos are human beings and are interested in being born.

Postmortem conception is a controversial area of ART. The consequence of freezing of human sperm is the ability to conceive children after the father’s death. As Shakespeare wrote: „And nothing ‘gainst Time’s scythe can make defence / Save breed, to brave him when he takes thee hence”, but in fact, severe emerging questions are raised in this context. The law has to decide whether children conceived after their fathers’ deaths are entitled to inherit in intestacy and thus eligible to receive a sort of social security benefits.

Afterwards, one chapter presents the contradictions of anonym donation and the different solutions followed by the examined countries. However, some statutes or constitutional assumptions stipulate that the offspring has the right to access information about ancestry in general, but it can not be enforced because of anonymity provisions in connection with ART. Hence, e. g. the Hungarian regulation raises constitutional qualms, while Germany has not exempted donors from legal responsibilities towards the child.

ARTs related reproductive torts provide a quite new area in this topic. For example a clinic fertilizes a woman’s eggs with the wrong man’s sperm mistakenly and she bore a stranger’s rather than her husband’s child, or a clinic implants one woman’s embryos in another’s uterus, or donor sperm transmits a genetic disease to the offspring. Should parents claim for damages, for emotional distress? Should tort law recognize and protect their procreative interest? Courts usually insert these cases in the frames of the well-known phenomena of wrongful conception, wrongful birth and wrongful life.
A separate chapter presents the theme of surrogacy, an overview of the debate and its importance in the current legal, bioethical, and political climate of the examined countries. Surrogacy provokes hot debates and it forces a re-examination of the concept of motherhood. The essay analyses the dilemmas tied to the execution of surrogacy agreements, the rights and obligations of the parties, the controversies in connection with the agreed compensation paid to the surrogate, and the theoretical and practical questions of the parental status with special emphasis laid upon maternity, and finally, the effectiveness of the regulation.

It is worth noting that an overall applicable concept of maternity and paternity does not exist, it depends on whether conception and childbearing occurs naturally or artificially and, in the latter case, whether a surrogate is involved or not.

Part III construes the possibilities of the manipulations, experiments and researches carried out on embryos in vitro.

The topic provides a two-way approach: firstly, medical science can consider the parent’s desire for a healthy or perfect child through ART and in order to this idea several biotechnological methods are available such as preimplantation genetic diagnosis, germ-line manipulation, genetic enhancement and sex selection, but it is a moot point that to what extent they could be applicable. Tissue typing also belongs to this methods which is relative new and enables an embryo to be selected as a donor match for an existing sibling suffering from a disease curable by transplant.

Secondly, the dissertation discusses extensively the law related aspects of the different areas of scientific research which would offer new medical treatments as a consequence of human embrionic stem cell research and therapeutic cloning. While these methods offer a ground-breaking promise that could help improve the lives of those who suffer from many incurable injuries, e.g. Alzheimer’s or Parkinson’s desease, scientists must use a process which destroys human embryos in order to obtain cells from them. Although the method is not clearly proven and rather unsecure, the future potential of it is great. Notably, attention has to be paid to the moral and legal concerns raised by human embryonic stem cell research. The debate about it raises novel
questions about the status of the human embryo: Somatic cell nuclear transfer (SCNT) as the frequently used method of therapeutic cloning was a scientific breakthrough, but it assumes that sperm and thus traditional fertilisation is no more needed in the process to create an embryo. As a result, society and the law have to begin to construct new understandings of the term „embryo”. Moreover, legal regulation has to redefine it.

Following this, one chapter discusses the ethical and legal challenges as well as the moral and legal framework of research on human-animal chimera embryos. In this field concerns attached to stem cell research could be modified according as chimeras are seen to be human or not. Similarly one chapter deals with alternative techniques used to retrieve human embryonic stem cells which are seemingly „embryo-friendly” such as altered nuclear transfer.

Finally, a chapter covers the future scientific and medical perspectives of human reproductive cloning as the part of the right to procreate via ART and argues on behalf of statutory intervention.