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978-1-107-03185-2 - Human Cloning: Four Fallacies and their Legal Consequences

Kerry Lynn Macintosh

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HUMAN CLONING

Since Dolly the sheep was born, controversy has swirled around the technology of cloning. We recoil at the prospect of human copies, manufactured men and women, nefarious impersonators, and resurrections of the dead. Such reactions have serious legal consequences: lawmakers have banned stem cell research along with the cloning of babies. However, what if our minds have been playing tricks on us? What if everything we thought we knew about human cloning is rooted in intuition rather than fact?

Human Cloning: Four Fallacies and Their Legal Consequences is a rollicking ride through science, psychology, and the law. Drawing on sources ranging from science fiction films to the Congressional Record, this book unmaskes the role that psychological essentialism has played in bringing about cloning bans. It explains how hidden intuitions have caused conservatives and liberals to act contrary to their own most cherished ideals and values.

Kerry Lynn Macintosh is a member of the law and technology faculty at Santa Clara University School of Law. She received her BA from Pomona College and her JD from Stanford Law School, where she was elected to the Order of the Coif. Professor Macintosh is the author of *Illegal Beings: Human Clones and the Law* (2005). She has published articles in the field of law and technology in the *Journal of Law, Technology & Policy*; *Harvard Journal of Law & Technology*; *Boston University Journal of Science & Technology Law*; *Berkeley Technology Law Journal*; and other journals. Professor Macintosh is a member of the American Law Institute, a law reform organization.

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CAMBRIDGE BIOETHICS AND LAW

This series of books was founded by Cambridge University Press with Alexander McCall Smith as its first editor in 2003. It focuses on the law's complex and troubled relationship with medicine across both the developed and the developing worlds. In the past twenty years, we have seen in many countries increasing resort to the courts by dissatisfied patients and a growing use of the courts to attempt to resolve intractable ethical dilemmas. At the same time, legislatures across the world have struggled to address the questions posed by both the successes and the failures of modern medicine, and international organizations such as the WHO and UNESCO now regularly address issues of medical law.

It follows that we would expect ethical and policy questions to be integral to the analysis of the legal issues discussed in this series. The series responds to the high profile of medical law in universities, in legal and medical practice, as well as in public and political affairs. We seek to reflect the evidence that many major health-related policy debates in the United Kingdom, Europe, and the international community over the past two decades have involved a strong medical law dimension. With that in mind, we seek to address how legal analysis might have a trans-jurisdictional and international relevance. Organ retention, embryonic stem cell research, physician-assisted suicide, and the allocation of resources to fund health care are but a few examples among many. The emphasis of this series is thus on matters of public concern and/or practical significance. We look for books that could make a difference to the development of medical law and enhance the role of medico-legal debate in policy circles. That is not to say that we lack interest in the important theoretical dimensions of the subject, but we aim to ensure that theoretical debate is grounded in the realities of how the law does and should interact with medicine and health care.

Series Editors

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LEGAL CONSEQUENCES

Kerry Lynn Macintosh

Santa Clara University School of Law



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Introduction

MAMMALIAN CLONING IS A RELATIVELY NEW SCIENCE, one that burst onto the scene at the end of the twentieth century. In 1996, scientists took a cell from the frozen tissue of a long-dead sheep and used it to clone a lamb named Dolly. When this achievement was announced in 1997, the public immediately realized that the technology might be applied to human beings.

Safety was an immediate concern for many observers. Initial experiments with animals had low success rates, leading to legitimate concerns that cloning might cause physical harm to mothers and children. However, safety was far from the only objection that the prospect of human cloning inspired. People from all walks of life, from scientists to journalists to political leaders, framed the technology as a means of manufacturing copies of living or deceased persons. Responding to public hysteria, federal regulators in the United States prohibited the cloning of babies, and many state legislatures followed suit.

Sixteen years have passed since Dolly was born. During that span of time, researchers all over the world have continued to experiment with the cloning of animals. Birth rates have climbed and healthy animals are common. Meanwhile, other scientists have succeeded in cloning human embryos. Their goal is to create cloned stem cells for research and therapy. However, the same research that could create new drugs or replacement organs may render human cloning not only possible but reasonably safe. The day may come when cloning is no more hazardous for mothers

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and children than in vitro fertilization. Therefore, before the first cloned baby is born into a hostile world, it is important to reexamine objections to cloning that are not based on safety concerns.

This book proceeds in three parts. Part I updates the science of cloning. It explains that researchers have experimented with new methods of animal cloning and improved birth rates. Contrary to public expectations, animals born through cloning are individuals rather than copies. They are ordinary members of their species, not designer products or resurrections of the dead. Extrapolating from this data, Part I explains why humans born through cloning¹ will also be unique human beings with their own lifespans.

Part II contrasts these scientific realities with the psychology of cloning. Drawing upon popular culture, the media, and government reports, it documents the existence of popular fallacies that construe animals and humans born through cloning as copies, artifacts, impostors, and resurrections. Part II traces these fallacies back to psychological essentialism – a cognitive heuristic that some scholars believe evolved tens of thousands of years ago.

Finally, Part III focuses on the law of human cloning. It shows how false intuitions have masqueraded as reasoned public discourse and spawned regulatory actions, bills, and laws that ban not only the cloning of babies but also stem cell research. These bans violate the American commitment to reproductive freedom, scientific freedom, and egalitarianism. Part III advocates a fresh approach toward the regulation of human cloning, one in which education and counseling play a leading role.

¹ Scientific articles, popular culture, the media, and government reports often describe animals and humans born through cloning as “clones.” However, as Chapter 4 explains, the word “clone” has become a synonym for copy in our culture. Also, when used as a common noun, clone reinforces essentialist intuitions that are scientifically inaccurate. Therefore, in this book, I seldom use clone as a noun (except when I am describing or citing a research source that itself employs the term). Instead, I have used the word as a verb (“to clone”), gerund (“human born through cloning”), or adjective (“cloned human”).