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THE LEGAL PERSON AND THE ONTOLOGY OF THE SELF: A JURISPRUDENTIAL STUDY OF RIGHTS IN THE CRISPR ERA

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I. Introduction

The **CRISPR–Cas9 gene-editing system** marks a radical shift in human biology. Where the genome was once treated as a natural limit to legal personhood—fixed, inherited, and immutable—it is now a *programmable entity*. By making it possible to modify DNA at the embryonic or germ-line level, CRISPR reopens long-settled legal questions: *What is bodily integrity when the body is still forming? Who can consent to genomic change for someone yet unborn? Can rights remain conceptually stable when the "self" itself becomes subject to design?*

In 2018, Chinese scientist *He Jiankui* created the world's first gene-edited babies, sparking international outrage, legal sanctions, and renewed debate over bioethics and regulation. India, too, finds itself at a crossroads. On one hand, the India Constitution robustly protects life, dignity, and autonomy under *Article 21*, on the other hand, India lacks binding legislation on germ-line editing, leaving a regulatory vacuum governed only by advisory guidelines from the *Indian Council of Medical Research*. Coupled with India's expanding biotech sector and aspirations in genomic medicine, this legal ambiguity poses both a danger and a conceptual opportunity.

This paper argues that *the CRISPR era compels us to rethink the legal foundations of rights*. Traditional paradigms—natural law, legal positivism, and critical theory—presume a stable, embodied legal subject. But CRISPR renders that subject fragmented, malleable, and potentially engineered. To address this shift, we propose a *constructivist ontology* of rights: *a framework that understands rights not as eternal truths or mere statutory products, but as evolving relational constructs shaped by biology, law, and technology*.

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By situating this inquiry in the Indian constitutional context and drawing on international regulatory trends, this paper offers a jurisprudential intervention. The goal is not to resist gene editing outright, but to ensure that the legal imagination keeps pace with the biological one—so that, in reshaping genomes, we do not lose sight of justice.

II. Background

A. Jurisprudential Ontology of Rights

Ontology, in legal theory, concerns what kinds of entities law recognizes and how they exist—what it means, for example, to be a person, a right-holder, or a subject of justice. Classical jurisprudence has long offered three ontological accounts of rights:

- *Natural-law* theorists argue that rights pre-exist the law and are rooted in human nature or divine reason.
- *Legal positivists* claim rights are valid only when recognized by a sovereign authority—either through statute, judicial decision, or administrative rules.
- *Critical legal and post-humanist* theorists treat rights as social and linguistic constructs shaped by power, ideology, or technological systems.

Historically, each of these frameworks has been flexible enough to adapt to certain biomedical innovations—such as organ transplantation, assisted reproductive technologies (ART), and brain death criteria. But those precedents still assumed a stable human subject—anchored in body, memory, and social role. CRISPR, by contrast, intervenes at the level of identity formation itself, raising questions not just about who holds rights, but how legal subjects are constituted in the first place.

This paper *departs from classical ontologies and instead develops a constructivist ontology of rights, wherein legal entitlements co-emerge with the biological and institutional shaping of the person*. This departure is necessary to account for CRISPR's potential to edit personhood before it ever fully materializes.

B. Scientific and Regulatory Landscape of CRISPR

CRISPR–Cas9 (*Clustered Regularly Inter-spaced Short Palindromic Repeats*) is a genome-editing tool derived from bacterial immune systems. It allows researchers to cut and modify DNA with extraordinary precision, low cost, and relative ease. While initial applications focused on somatic cells (non-heritable interventions), CRISPR has since been applied to germ-

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line cells and embryos, raising the stakes significantly. Germ-line edits are passed down to future generations, fundamentally altering the genetic makeup of descendants.

Internationally, responses to CRISPR have been uneven. *The Oviedo Convention* (Council of Europe, 1997) prohibits germ-line modification. *Universal Declaration on the Human Genome and Human Rights* condemns eugenic practices and calls for restraint. In China, after the *He Jiankui scandal*—where twin embryos were edited to resist HIV—regulators criminalized unapproved human gene editing and promised stricter oversight. In the US., the FDA restricts germ-line work through funding bans, while debates continue around gene therapy and commodification of genetic data.

In India, the landscape is notably underdeveloped. The Indian Council of Medical Research (ICMR) prohibits germ-line editing through non-binding guidelines, yet lacks statutory authority. There is no legislation akin to Singapore's *Human Biomedical Research Act* or Australia's *Gene Technology Act*. This regulatory vacuum enables research to proceed in an ambiguous space—unregulated but not explicitly banned—raising serious concerns about legality, consent, and ethical review.

C. Intersection with Indian Constitutional Law and International Norms

Article 21 of the Constitution of India guarantees the right to life and personal liberty. In landmark decisions such as *K.S. Puttaswamy v. Union of India (2017),* the Supreme Court held that this includes *bodily integrity, autonomy, and informational privacy.* Subsequent decisions have interpreted *Article 21* to include the *right to health, environmental protection, and even reproductive choice*. These expansive readings make Indian constitutional law a fertile ground for *recognizing genetic integrity as a fundamental right*.

Yet significant gaps remain. *India is not a signatory to the Oviedo Convention*. It has endorsed UNESCO's declarations, but these remain soft law with no domestic binding effect. No statutory regime governs gene editing, and no mechanism currently exists to resolve potential conflicts between emerging genetic technologies and existing rights frameworks. This underlines the urgency of re-conceptualizing rights within a forward-looking, ontologically sensitive framework.

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D. Empirical Insights and Case Studies

Case Study 1: The He Jiankui Scandal (China, 2018)

He Jiankui edited the CCR5 gene in embryos to confer resistance to HIV, resulting in the birth of twin girls. The experiment bypassed ethical oversight, lacked proper consent, and targeted a gene with unknown long-term effects. After global condemnation, He was imprisoned and China promised stricter gene-editing laws. The case reveals the dangers of unregulated CRISPR research and the inadequacy of existing legal ontologies to capture these risks.

Case Study 2: CRISPR Research Trends in India

India's CRISPR activity has grown, particularly in agricultural and disease-related research. Institutes like CSIR and IITs conduct CRISPR trials, often in animal or plant contexts. However, human genome-editing remains in a grey zone. Public bioethical debates are scarce, and regulatory awareness among researchers varies. Surveys conducted by bioethics scholars (e.g., ICMR's 2020 reports) show cautious optimism mixed with concerns about misuse, safety, and equity.

III. Classical Jurisprudential Accounts of Rights

A. Natural-Law Tradition

Ontological Premise

Natural-law theorists hold that rights derive from a *pre-political moral order*, rooted in human nature or divine will. Aquinas sees rights as rational participation in eternal law; Locke grounds them in self-preservation and labor. These rights are not granted by law but discovered through reason or inherent dignity. Their validity transcends statute or custom, and they remain constant across time and culture.

CRISPR Implications

If human nature forms the ontological basis of rights, CRISPR—by altering that very nature—presents a profound threat. Germ-line editing, especially when used for enhancement, may be viewed as a violation of the moral core that gives rights their content. A natural-law theorist could argue that CRISPR disrupts the sacred continuity of the human essence, undermining the universalizability of rights.

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Constructivist Response

But this view presumes a fixed "nature" immune to social or technological transformation. Human capacities—from life expectancy to reproductive ability—have always been shaped by intervention. Dignity itself evolves; it once excluded women, slaves, or non-Christians from rights. The constructivist ontology posits that *personhood and rights are mutually formed, including through technologies like CRISPR.* Rather than desecrating nature, gene editing *may* participate in the ongoing co-creation of what counts as the human.

B. Legal Positivism

Ontological Premise

Positivists argue that *rights exist only where recognized by a valid legal system*. Hart's "rule of recognition" determines what counts as law; Kelsen's pure theory views rights as logical consequences of legal norms. Dworkin softens this rigidity by treating rights as moral principles embedded in legal practice, but still grounded in institutional recognition.

CRISPR Implications

Under positivism, the right to genetic integrity does not exist unless codified by statute or recognized by courts. This approach offers legal clarity: if no law protects embryos from editing, then no such right exists. But it also reveals positivism's limits—what happens when technology moves faster than legislation? When lawmakers cannot foresee the ontological transformations enabled by CRISPR?

Constructivist Response

Constructivist ontology agrees that law plays a crucial role—but it rejects the idea that rights wait for recognition. Instead, it sees rights as emerging through legal contestation, scientific practice, and public ethics. The law is not simply a mirror of norms; it is an active participant in shaping subjects. CRISPR demands a jurisprudence that can respond proactively, not just retroactively, to the emergence of new kinds of persons.

C. Critical Legal Studies and Post-humanism

Ontological Premise

Critical Legal Studies (CLS) *challenges the neutrality and coherence of rights discourse. Rights are seen as contingent, ideological tools that often reinforce hierarchy and exclusion.* Post-humanist thinkers go further, arguing that subjectivity is no longer exclusively human, but

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shared with machines, ecosystems, and networks. The liberal legal subject—autonomous, rational, embodied—is destabilized by the rise of technologically mediated identity.

CRISPR Implications

CLS and post-humanism offer rich tools for critiquing the political economy of gene editing: patent monopolies, biomedical colonialism, and the commodification of the genome. They reveal how CRISPR's promise is unequally distributed, often reinforcing elite control under the guise of scientific progress. Posthumanists might even question whether rights themselves are adequate to govern hybrid beings or cyborg subjectivities.

Constructivist Response

The constructivist approach shares critical theory's suspicion of fixed legal categories. It agrees that power is embedded in the making of personhood. But unlike some strands of CLS, it does not abandon the project of rights. Instead, it seeks to rebuild them—not as static entitlements, but as dynamic co-productions. A constructivist ontology welcomes the challenge of governing mutable selves, precisely because it sees rights as tools to shape and constrain emerging forms of life, not merely to reproduce existing power structures.

IV. CRISPR's Ontological Disruptions

CRISPR does *more* than alter genes; it *challenges the legal foundations of personhood and rights*. Unlike earlier biomedical advances, CRISPR intervenes at the level of formation—it acts before birth, shaping individuals who do not yet exist and altering the identity of those who do. This section outlines four domains where CRISPR disrupts legal ontology and forces us to reconceive how rights are held, protected, and even defined.

A. Genetic Malleability and Bodily Integrity

Expanded Conception of Integrity

Traditionally, bodily integrity refers to freedom from unwanted physical intrusion—assault, surgery without consent, or state-administered punishment. But CRISPR *introduces a subtler form of intrusion*: reprogramming the genome itself. For example, consider a child born after CRISPR-mediated removal of a sickle cell mutation. The intervention may prevent disease—but it also changes something fundamental about their biological trajectory. Is this an enhancement, a cure, or an ontological redefinition?

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Consent and Capacity

Legal systems rest on the premise that *rights-holders can consent*. But gene editing often occurs before legal subjectivity begins—in the embryo or zygote. Parents routinely make decisions on behalf of children (e.g., vaccinations), but germline edits are irreversible and heritable. Can parental consent suffice for changes that bind not only the future child but future generations?

Constructivist Framing

In this context, bodily integrity must be understood not just as physical non-interference, but as part of an evolving identity project. The right to bodily integrity should be reimagined as a co-constitutional right—where the self and rights co-produce one another through biological intervention.

B. Temporal Disjunctions and Prospective Persons

Rights Before Birth

Classical doctrine grants full legal rights at birth, or in limited cases, to the fetus. CRISPR demands that we consider the "prospective person"—someone who does not yet exist, but for whom decisions with permanent consequences are made. Should such persons have legal entitlements held in trust until they become juridical subjects?

Speculative Liability

If a germline intervention causes harm—say, a gene deletion that later triggers a disease—who is liable? The individual was not born when the intervention occurred. Traditional tort law requires a present plaintiff. CRISPR collapses this temporal boundary: the act precedes the actor, but the harm follows.

Retrospective Remedy

Imagine a young adult discovering that they were part of an unregulated CRISPR trial and now face increased cancer risk due to off-target effects. Can they claim a retrospective right to redress, even if the intervention was legal—or unregulated—at the time?

Constructivist Framing

These dilemmas illustrate temporal layering: rights must operate prospectively (to protect pre-persons), continuously (to monitor development), and retrospectively (to provide redress). CRISPR compels law to think across time, not just at fixed moments of legal status.

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C. Programmable Identity and Legal Personhood

Identity as Code

With CRISPR, *identity becomes something programmable*. If intelligence, temperament, or physical features can be edited, personhood becomes modular rather than continuous. Legal subjectivity, which depends on presumed psychological coherence and agency, is thrown into question.

Enhanced Beings

What if future children are edited to improve memory or disease resistance? Are they still equal before the law? Should CRISPR-enhanced individuals be treated like any other citizen, or will the law need to recognize a new class of "enhanced persons" with differentiated rights and duties?

Fragmentation of the Self

Polygenic editing—changing multiple traits simultaneously—may lead to a fragmented self, assembled through successive decisions made by parents, scientists, and algorithms. Who, then, is the legal subject: the embryo that once was, the child that is born, or the collective that designed them?

Constructivist Framing

Legal personhood must evolve from a singular, bounded concept to a distributed and constructed one. CRISPR invites a model of personhood where identity is formed across biological, social, and institutional domains. Legal doctrine must recognize this networked entanglement.

D. Genomic Data and the Right to Forget

Hybrid Nature of DNA

DNA is both a biological code and a form of deep personal data. As more people undergo genome sequencing, questions emerge about data ownership, storage, and deletion. Can someone "erase" their genetic data from research databases if it also relates to family members? Can a future adult undo edits made before their birth?

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Data Sovereignty and Secondary Use

Even when consent is given for one use—say, medical research—genomic data may be repurposed for insurance profiling, pharmaceutical marketing, or criminal databases. India's pending Digital Personal Data Protection Act does not yet robustly cover genetic data, leaving these risks largely unregulated.

Permanence vs. Privacy

Unlike other personal data, genetic information cannot be meaningfully deleted from the body. This undermines the logic of data privacy as erasure. How should legal systems reconcile the immutability of the genome with evolving demands for informational autonomy?

Constructivist Framing

Here, the right to forget becomes not a literal erasure, but a relational entitlement to control over how one's biological information is shared, stored, and used across time and institutions. This right should be procedural, dynamic, and situated within socio-technical networks.

V. Doctrinal and Constitutional Terrain

While CRISPR's ontological disruptions provoke fundamental theoretical questions, they also demand pragmatic legal responses. This section explores how India's constitutional and statutory frameworks, as well as comparative international models, engage with the evolving concept of genetic rights. It also identifies critical doctrinal gaps and proposes pathways for legal reform.

A. Indian Constitutional Framework

Genetic Integrity under Article 21

Article 21 of the Constitution of India guarantees that "no person shall be deprived of his life or personal liberty except according to procedure established by law." Over time, the Supreme Court has interpreted this provision to include a wide spectrum of entitlements: bodily autonomy, medical decision-making, reproductive choice, and data privacy. In *K.S. Puttaswamy v. Union of India* (2017), the Court explicitly recognized privacy as an element of dignity and autonomy, extending protection to personal health and genetic data.

On this basis, one can argue that a right to genetic integrity—protection against unauthorized or unsafe gene editing—follows logically from *Article 21*'s evolving scope. This right would

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safeguard individuals from interventions that alter their biological identity without informed consent, due process, or ethical justification.

Precedent for Expansive Rights

Indian courts have previously recognized emergent rights such as environmental protection, clean air, shelter, and access to healthcare under Article 21, even in the absence of explicit statutory language. This doctrinal flexibility makes Indian constitutional law particularly suited to recognizing rights rooted in bioethical and ontological concerns, including those raised by CRISPR.

Legislative Silence and Judicial Innovation

The *Indian Council of Medical Research* (ICMR) prohibits germ-line editing through ethical guidelines, but these lack legal force. There is no statute—neither a Genetic Rights Act nor an amendment to the Drugs and Cosmetics Act—that directly addresses gene-editing technologies. In this vacuum, strategic public interest litigation could prompt judicial recognition of genetic integrity as a fundamental right and compel Parliament to legislate.

B. International Instruments and Comparative Doctrines

European Framework: The Oviedo Convention

The Council of Europe's Convention on Human Rights and Biomedicine (1997), also known as the Oviedo Convention, prohibits any intervention aimed at modifying the human genome unless for preventive, diagnostic, or therapeutic purposes. It explicitly bans heritable (germ-line) genome editing. Although India is not a signatory, the Convention remains the most comprehensive binding international framework on biomedical ethics.

UNESCO Declarations and Soft Law

UNESCO's Universal Declaration on the Human Genome and Human Rights (1997) states that the genome is the "heritage of humanity" and warns against practices that violate dignity, including eugenics and non-consensual manipulation. While non-binding, such declarations inform India's bioethical debates and judicial reasoning, especially in Article 21 jurisprudence that draws on international norms (*Navtej Singh Johar v. Union of India*, 2018).

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Singapore's Human Biomedical Research Act (HBRA), 2015

Singapore provides a more concrete model. The HBRA establishes a licensing regime for biomedical research, including genomics. It mandates ethics review, consent protocols, and institutional oversight. Notably, it prohibits germ-line modification in embryos and permits somatic gene therapy under strict regulation. This model balances scientific innovation with procedural safeguards—offering a template India can adapt.

China's Post-He Regulatory Response

Following the He Jiankui scandal, Chinese authorities amended their Criminal Law to prohibit unauthorized genome editing in humans. The Ministry of Science and Technology introduced new guidelines requiring formal ethics approval and government oversight. This swift regulatory shift reveals how national legal systems can recalibrate quickly when faced with biotechnological overreach—a lesson for India's slow-moving bioethics regime.

U.S. Fragmentation and Judicial Ambiguity

The US. lacks a unified bioethics law but restricts germ-line editing through the Dickey–Wicker Amendment, which bars federal funding for such research. Courts have weighed in on related issues: in *Association for Molecular Pathology v. Myriad Genetics* (2013), the Supreme Court ruled that naturally occurring DNA cannot be patented, reinforcing the idea that *the genome belongs to all, not to private entities.*

C. Doctrinal Gaps and Prospects for Reform

Legal Lacunae

India's absence of a genetic rights framework leaves crucial questions unanswered:

- Can individuals seek compensation for gene-editing harms?
- Do embryos or future persons have standing?
- Who regulates cross-border CRISPR trials involving Indian participants?

Towards a Genetic Rights Act

India needs comprehensive legislation recognizing:

- The right to genetic integrity and identity continuity
- Mandatory ethics review for all human gene-editing research
- Informed consent protocols tailored to germ-line and somatic edits
- Redressal mechanisms for off-target or unintended consequences

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- A ban or moratorium on non-therapeutic germ-line editing pending public debate

Participatory Lawmaking

Finally, legal reform must not be technocratic. Public consultations with scientists, ethicists, tribal communities, and disability rights advocates should inform policy design. Genetic justice cannot emerge from labs and legislatures alone; it must be co-produced through inclusive deliberation.

VI. Towards an Ontology of Mutable Rights

The classical legal imagination views rights as fixed: either discovered in nature, granted by law, or constructed through critique. But CRISPR unsettles this framework. It blurs the line between human and design, nature and intervention, present and future. In doing so, it compels us to rethink what rights are, whom they protect, and how they evolve. This section outlines a constructivist ontology of rights that responds to these shifts by emphasizing:
(1) co-constitution with a mutable legal self,
(2) networked entitlements in socio-technical systems, and
(3) temporal layering across generational and legal time.

A. Rights Co-Constitutive of the Self

Traditional theories presume that *rights attach to already-formed subjects*. But in the CRISPR context, *the legal subject is still in formation*—constructed biologically, socially, and legally. For example, the act of editing an embryo to remove a disease-causing mutation simultaneously presumes certain rights (parental consent, medical ethics) and creates new ones (a future person's claim to bodily integrity or genetic redress). Here, rights and personhood are not sequential but co-emergent.

Legal Analogy

Consider the Indian legal recognition of transgender identity. The Supreme Court's decision in *NALSA v. Union of India* (2014) did not merely affirm pre-existing rights but helped constitute a new legal subject by naming and protecting it. Similarly, CRISPR-related rights would shape and stabilize the categories of "edited persons," "genomic subjects," or "prospective individuals."

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Jurisprudential Implication

The law must abandon the model of rights as accessories and adopt one where rights are ontological devices—they help create the very beings they protect.

B. Networked Entitlements

CRISPR interventions do not occur in isolation. They involve a network of actors and protocols: scientists, institutions, ethics boards, data repositories, and consent frameworks. Rights in this context cannot be solely individualistic. They must extend across the network—what might be called distributed or procedural rights.

Imagine, a parent consenting to CRISPR therapy for a child relies on a chain of institutional processes: informed consent forms, ethics committee approvals, regulatory oversight, and data safeguards. If something goes wrong—e.g., an off-target effect—the harm emerges not just from a single actor but from systemic failure. Thus, rights must be enforceable across nodes, not just at the individual interface.

Legal Tool

Instruments like protocol-based rights—where specific procedures become loci of enforceable entitlements—can embody this networked approach. For instance, India's future Genetic Rights Act could mandate that independent ethics review is not just a regulatory step but a right of the subject.

C. Temporal Layering of Rights

CRISPR *entangles rights across time*. It *affects* people who do not yet exist, imposes consequences that unfold over decades, and generates harms that may be discoverable only retrospectively. The law must move beyond the "snapshot" model of rights (fixed at birth or adulthood) and adopt a layered, temporal approach.

1. Prospective Rights

These are entitlements held in trust for future persons—zygotes, embryos, or unborn children. For example, India could recognize a fiduciary obligation on researchers or parents to act in the best interest of the future individual whose genome is being edited.

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2. Continuity Rights

These protect the narrative coherence of selfhood. If a gene edit disrupts cognitive traits or personality, does the person retain legal continuity? Continuity rights would include mandatory genetic counseling, monitoring, and even psychological support for those undergoing or affected by gene therapy.

3. Retrospective Rights

These allow individuals to seek remedy after discovering harms caused by early genomic edits—off-target effects, data misuse, or lack of consent. Such rights may include compensation, re-editing (if feasible), or public acknowledgment and support.

Comparative Insight

The US. legal system allows for latent injury claims under tort law (e.g., asbestos exposure). A similar model could apply to CRISPR-related injuries, recognizing that harms may not manifest immediately or be traceable to a single actor.

D. Ontological Politics and Hegemony

Legal ontology is never neutral. The construction of "human" or "person" reflects ideological struggles. In the CRISPR era, various actors—pharmaceutical companies, state agencies, religious institutions, and patient groups—compete to define whose vision of the genome should prevail. This is what we call *ontological politics*.

Case in Point: Biotech Capitalism

Patent regimes allow private firms to monopolize gene-editing tools, framing the genome as a site of innovation and profit. This view may crowd out indigenous, feminist, or disability rights perspectives that value the genome as relational, sacred, or interdependent.

Human Rights Counterbalance

To resist such hegemony, the law must build pluralistic ontologies—ones that allow diverse visions of the body and identity to coexist. For instance, indigenous communities may conceptualize hereditary traits as collective inheritance, not individual property. A pluralistic legal framework would make space for co-governance, community ethics, and cultural diversity in regulating CRISPR.

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VII. Conclusion

CRISPR has given humanity the power to revise its biological future. This power carries the promise of healing, but also the peril of inequality, commodification, and irreversible harm. Law cannot afford to cling to static categories or wait passively for the science to settle. Instead, it must evolve—constructively, reflectively, and ethically—to ensure that when the genome is rewritten, justice is not written out.

Endnotes

1. Doudna, J. A., & Charpentier, E. (2014). The new frontier of genome engineering with CRISPR-Cas9. *Science*, *346*(6213), 1258096.
2. Feng Zhang et al., Genome Editing with CRISPR-Cas9: Principles and Potential, 33 *Nat. Biotechnol. 102* (2013).
3. Sheila Jasanoff, Designs on Nature: *Science and Democracy in Europe and the United States 276* (2005).
4. Haraway, D. (2013). *Simians, cyborgs, and women: The reinvention of nature*. Routledge.
5. Zechner, D. (2013). Rosi Braidotti: The Posthuman. *[rezens. tfm]*, (2).
6. Rose, N. (2001). The politics of life itself. *Theory, culture & society*, *18*(6), 1-30.
7. Agamben, G., & Sacer, H. (1998). Sovereign power and bare life.
8. Butler, J. (2011). *Bodies that matter: On the discursive limits of sex*. Routledge.
9. Esposito, R. (2008). *Bios: Biopolitics and philosophy*. U of Minnesota Press.
10. Jasanoff, S., & Hurlbut, J. B. (2018). A global observatory for gene editing. *Nature*, *555*(7697), 435-437.
11. National Academies of Sciences, Medicine, National Academy of Medicine, Committee on Human Gene Editing, Scientific, Medical, & Ethical Considerations. (2017). *Human genome editing: science, ethics, and governance*. National Academies Press.
12. Bioethics, N. (2018). Genome editing and human reproduction: social and ethical issues. *London: Nuffield Council on Bioethics*.
13. Mathur, R., & Swaminathan, S. (2018). National ethical guidelines for biomedical & health research involving human participants, 2017: A commentary. *Indian Journal of Medical Research*, *148*(3), 279-283.
14. Sass, H. M. (1998). UNESCO: Universal declaration on the human genome and human rights. *Journal of Medicine and Philosophy*, *23*(3).

 ISSN: 2582-6433

15. COUNCIL, O. E. (1997). Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine. *Oviedo: COE*.
16. Fukuyama, F. (2003). *Our posthuman future: Consequences of the biotechnology revolution*. Macmillan.
17. Habermas, J. (2014). *The future of human nature*. John Wiley & Sons.
18. Habermas, J. (2014). *The future of human nature*. John Wiley & Sons.
19. Dworkin, R. (1994). *Life's dominion: an argument about abortion, euthanasia, and individual freedom*. Vintage.
20. Clark, R. S. (1969). Hans Kelsen's Pure Theory of Law. *J. Legal Educ.*, *22*, 170.
21. Hart, H. L. A. (2012). *The concept of law*. OUP Oxford.
22. Bentham, J. (1879). *The principles of morals and legislation*. Clarendon Press.
23. Summers, R. S. (1965). Professor Fuller on Morality and Law. *J. Legal Educ.*, *18*, 1.
24. Finnis, J. (2011). *Natural law and natural rights*. Oxford University Press.
25. Locke, J. (2021). *Second treatise of government*. Phoemixx Classics Ebooks.
26. Nussbaum, M. C. (2007). Frontiers of justice: Disability, nationality, species membership. In *Frontiers of justice*. Harvard University Press.
27. Kennedy, D. (2002). The critique of rights in critical legal studies. *Left legalism/left critique*, *178*, 216-227.
28. Monahan, P. J., & Hutchinson, A. (1984). The Rights Stuff: Roberto Unger and Beyond. *Texas Law Review*, *62*, 1477.
29. Williams, P. J. (1991). *The alchemy of race and rights*. Harvard University Press.
30. Crenshaw, K. (1989). Demarginalizing the intersection of race and sex. Fem. *Leg. Theory*, 57-80.
31. Foucault, M. (2012). *The history of sexuality, volume 1*. Knopf Doubleday Publishing Group.
32. Radin, M. J. (1982). Property and personhood. *Stanford Law Review*, 957-1015.
33. Haberland, B. B. (2006). Germ-line Interventions in the International Regime of Human Rights and Human Dignity.
34. Cyranoski, D. (2019). China to tighten rules on gene editing in humans.
35. Chaudhary, M., Mukherjee, T. K., Singh, R., Gupta, M., Goyal, S., Singhal, P., ... & Sharma, P. (2022). CRISPR/Cas technology for improving nutritional values in the agricultural sector: an update. *Molecular Biology Reports*, *49*(7), 7101-7110.
36. Puttaswamy, J. K. *v. Union of India.(2017) 10 SCC 1*.

 ISSN: 2582-6433

37. Sangai, A. (2011). Promise of Reproductive Autonomy: Does Suchita Srivastava Walk the Talk. *NALSAR Stud. L. Rev.*, *6*, 46.
38. INDIA, R. I. (2021). Theoretical foundation of right to health in India. *Routledge Handbook of Global Health Rights*.
39. Nandakumar v. State of Kerala, (2018) 16 S.C.C. 602 (India).
40. Navtej Singh Johar v. Union of India, (2018) 10 S.C.C. 1 (India).
41. NALSA v. Union of India, (2014) 5 S.C.C. 438 (India).
42. Assembly, U. G. (1948). Universal Declaration of Human Rights, GA res. 217A (III), UN doc. *A/810 at*, *71*.
43. Assembly, U. G. (2025). International covenant on civil and political rights.
44. Singapore Human Biomedical Research Act, No. 29/2015.
45. Australia Gene Technology Act 2000 (Cth).
46. Mittelstadt, B. D., & Floridi, L. (Eds.). (2016). *The ethics of biomedical big data* (Vol. 29). Cham: Springer.
47. Viljoen, S. (2021). A relational theory of data governance. *The Yale Law Journal*, 573-654.
48. Richards, N. (2015). *Intellectual privacy: Rethinking civil liberties in the digital age*. Oxford University Press.
49. Zuboff, S. (2023). The age of surveillance capitalism. In *Social theory re-wired* (pp. 203-213). Routledge.
50. Ass'n for Molecular Pathology v. Myriad Genetics, 569 U.S. 576 (2013).
51. H. Tristram Engelhardt, Jr., The Foundations of Bioethics 140 (2d ed. 1996).
52. Law Commission of India, Report No. 274: Digital Privacy and Regulation (2022).
53. Scanlon, T. M. (2000). *What we owe to each other*. Harvard University Press.
54. Pettit, P. (1997). *Republicanism: A theory of freedom and government*. Oxford University Press.
55. Baxi, U. (2007). *The future of human rights*. Oxford University Press.
56. Bruno Latour, *Reassembling the Social 114–20* (2005).