UIC Law Review

Volume 55 | Issue 4 Article 1

2022

Body Revolution in Comparative Perspective: Promoting Equality Through Adoption of New Theory of Bodiliness, 55 UIC L. Rev. 615 (2022)

Arseny Shevelev

Georgy Shevelev

BODY REVOLUTION IN COMPARATIVE PERSPECTIVE: PROMOTING EQUALITY THROUGH ADOPTION OF NEW THEORY OF BODILINESS

ARSENY SHEVELEV & GEORGY SHEVELEV*

Since the beginning of time, people have been plagued by the reductionist temptation to understand the body only as that in which they are enclosed—no more, no less. Due to technological progress, prosthetics, ventilators, and organoids were later developed that allowed a person to remedy flaws inherent in nature, and in some cases to overcome the natural inequalities that resulted from genetic or sexual development. This paper proposes a revolutionary understanding of the body, based on a previously unknown five-part theory of "bodiliness." This theory allows for the granting of body status, and similar protection for parts whose bodily status no one

*Arseny Shevelev, Hogan Lovells LLP, Junior Associate (arseny.y.shevelev@gmail.com) and Georgy Shevelev, Sole Practitioner (georgy.y.shevelev@gmail.com). We greatly appreciate the careful attention and thoughtful improvements of the team of editors at the UIC Law Review, and namely Ivory Djahouri, Michelle Lewis, Kaylee Hartman, and Bonnie Perrino.

could label or imagine. This brand-new approach, as will be illustrated, makes it possible to overcome things, such as, natural inferiority, gender and sexual inequality, as well as bodily discrimination.

I. INTRODUCTION

In 4th century B.C., the people of ancient Athens might have witnessed a curious and even somewhat amusing phenomenon. Diogenes of Sinope,[1] known for his deeply philosophical antics, wandered the streets of Athens – which had seen much – with a lighted lantern in the middle of the day. Consequently, Diogenes would reply to any onlookers that he was "looking for a man."[2] The purpose of this article is to find the correct concept of the human body. Although this is a major feat, similar to Diogenes' curiosity during the 4th century, it must be done. However, we cannot be silent, as such an obviousness is deceptive. The indisputable proof of this can be found in the myriads of thick folios, stretching unbroken through the millennia, and blindly reproducing a particular view of the human body. This view is as old as the world and has insignificantly changed over hundreds of years, simultaneously, as the human body has imperceptibly changed and evolved over time in the process of biological evolution. Past views of the human body were generated by a mass of fused barbaric prejudices and harmful stereotypes about human nature.[3] These superstitions, being from their origin stillborn, have been surprisingly well preserved and have survived up to current times – embalmed with the formalin of traditionalism and conservatism.

1. Diogenes of Sinope (l. c. 404-323 BCE) was a Greek Cynic philosopher best known for holding a lantern to the faces of the citizens of Athens claiming he was searching for an honest man. *See* Joshua Mark, *Diogenes of Sinope*, WORLD HIST. ENCYCLOPEDIA (Aug. 2, 2014) www.worldhistory.org/Diogenes_of_Sinope/ [https://perma.cc/GP5N-47FX] (noting that Diogenes rejected the concept of "manners" as a lie and always advocated complete truthfulness under any circumstances).

2. DIOGENES LAËRTIUS, LIVES OF THE EMINENT PHILOSOPHERS, at VI:41 (Robert Drew Hicks eds., Pamela Mensch trans., Loeb Classical Library ed., Harv. Univ. Press 1925) (2018).

3. For example, for a long time, the simple gender identity of being a female deprived women of many social and political rights and patriarchal domination. *See* Susan M. Cruea, *Changing Ideals of Womanhood During the Nineteenth-Century Woman Movement*, 19 ATQ 187, 188-89 (2005) (writing on the history of the movement for women's rights). Also, such a natural trait of the human body, such as the color of the skin, made one person the object of ownership (i.e., slave) and the other the owner thereof (slaveholder). *See, e.g.*, Khushbu Shah & Juweek Adolphe, *400 Years Since Slavery: A Timeline of American History*, THE GUARDIAN (Aug. 16, 2019), www.theguardian.com/news/2019/aug/15/400-years-since-slavery-timeline [https://perma.cc/4ZZY-K44T] (describing in brief the history of American slavery).

There is no doubt that the described genealogy of the concept of the human body requires a serious revision of the concept of the body. This irreconcilable need is reinforced by the invaluable importance that the concept of the human body has for research related to the legal and social status of humans.

The concept of the human body is of fundamental and even paradigmatic importance for law and legal research on major social issues, such as race,[4] gender[5] and sexuality.[6] The human body

4. In the context of racial studies, the notion of the body is important because the human body, and the differences that may exist in people's bodies, are taken as the basis for defining race. ELIZABETH ANDERSON, THE IMPERATIVE OF INTEGRATION 157-79 (2010); MICHAEL OMI & HOWARD WINANT, RACIAL FORMATION IN THE UNITED STATES 110 (3rd ed. 2015); *cf.* Ekow N. Yankah, *Pretext and Justification: Republicanism, Policing, and Race*, 40 CARDOZO L. REV. 1543, 1573 (2019) (mentioning the body's color as a cause for criminal justice oppression against people of color); *see also* Bennett Capers, *Policing, Race, and Place*, 44 HARV. C.R.-C.L. L. REV. 43, 48, 72 (2009) (discussing student body diversity as a compelling state interest that justified the use of race in university admissions).

5. *See Outlawing Trans Youth: State Legislatures and the Battle over Gender-Affirming Healthcare for Minors*, 134 HARV. L. REV. 2163, 2164 n.8 (2021) (mentioning the body as a central concept in the consideration of transgender issues because the culmination of a transgender person's exercise of rights is to transition, which is defined as bringing the body into conformity with gender identity), *see also* GEORGIANN DAVIS, CONTESTING INTERSEX: THE DUBIOUS DIAGNOSIS 7-8 (2015) (explaining the attachment of gender to the body in the context of intersexuality), *e.g., Classification and Housing of Transgender Inmates in American Prisons*, 127 HARV. L. REV. 1746, 1757 (2014) (noting gender identity is closely connected with body diversity), *see Constitutional Privacy and the Fight over Access to Sex-Segregated Spaces*, 133 HARV. L. REV. 1684, 1693 (2020) (quoting lawsuits against transgender individuals based on the failure to recognize their gender reassignment).

6. The concept of human sex is closely related to that of the body. *See, e.g.*, Jessica A. Clarke, *They, Them, and Theirs*, 132 HARV. L. REV. 894, 897 (2019) (indicating that sex refers to bodily characteristics). It should be noted that literature exploring women's legal status (including feminist theory) often make references to women's bodies when criticizing the established patriarchal order. *See* ALISON M. JAGGAR, FEMINIST POLITICS AND HUMAN NATURE 130-32 (1983) (discussing in Marxist terms women's alienation from their own bodies); CATHARINE A. MACKINNON, TOWARD A FEMINIST THEORY OF THE STATE 189-90 (1989) (discussing how women were alienated from rights to their bodies, which became owned by men); Guido Calabresi, *Foreword: Antidiscrimination and Constitutional Accountability (What the Bork-Brennan Debate Ignores)*, 105 HARV. L. REV. 80, 85 (Nov. 1991) (indicating that anti-abortion legislation can be viewed as applying a communitarian approach to women's bodies); Michele Goodwin, *Women on the Frontlines*, 106 CORNELL L. REV. 851, 858 (2021) (pointing to discrimination against women and particularly the exploitation of black women's bodies); Michele Goodwin & Erwin Chemerinsky, *Pregnancy, Poverty, and the State*, 127 YALE L. J. 1270, 1278-79 (2018) (highlighting the deprivation of the poor of bodily autonomy and, particularly, women of color, as well as to the application of sterilization and eugenics to their bodies); Dorothy E. Roberts, *Critical Race Feminism*, *in* RESEARCH HANDBOOK ON FEMINIST JURISPRUDENCe 112, 117-18 (Robin West & Cynthia Grant Bowman eds., 2019) (arguing that in the United States the state has tried to regulate the bodies of

serves as the starting point for the entire social and legal system of coordinates, which addresses pressing social problems that are painfully familiar to many members of our society.[7] Unfortunately, contemporary studies of these kinds of problems–however profound and meaningful they may be for legal scholarship – have devoted remarkably little space to criticizing the old and developing a new concept of the human body. Consequently, this nullifies or significantly weakens the potential effect of research aimed at breaking the foundations of the past. The past has hindered societal achievement of social equality and inclusion. This futility of attempts at social transformation is hardly surprising, for in the absence of a logical new theory of bodiliness, many revolutionary thinkers had to compromise, often without realizing it, with an old view of the body that burdened rights like fetters and limited individual freedom like a framework. This article aims to offer a new theory of bodiliness, attempting to successfully start a body revolution. Fundamental and radical changes must be made to bring about a body revolution, all while being respectful of equality and individual choice.

Part II of this article is devoted to the famous dichotomy between natural and artificial body parts. The reader will learn what criteria are decisive in answering the question of whether an artificial, external object has really become part of a person. Also, this section questions and explains why artificial body parts should acquire the same status as natural body parts. Furthermore, this section will show how an answer to this question will prevent discrimination against people with disabilities. This approach will give disabled persons an effective way of entering society on equal

---

black women for centuries).

7. Recently, there have been an influx of cases that have highlighted the quintessence of social problems, relating to the human body. Thus, it will surely become a textbook case of Henrietta Lacks, a black woman whose cells were removed from her body without her consent, and by which the pharmaceutical companies enriched themselves with billions of dollars. Now, her descendants, represented by Ben Crump, who defended the interests of George Floyd's family, are suing in federal court in Baltimore against a company that skillfully took advantage of the "racially unjust medical system." *See* Emily Davies, *70 Years Ago, Henrietta Lacks's Cells Were Taken Without Consent. Now, Her Family Wants Justice*, THE WASHINGTON POST (Oct. 4, 2021), www.washingtonpost.com/local/legal-issues/henrietta-lacks-family-sues-company/2021/10/04/810ffa6c-2531-11ec-8831-a31e7b3de188_story.html [perma.cc/C52F-7TEC] (describing the lawsuit filed by representatives of Henrietta Lacks' estate against John Hopkins Hospital). In such a racially and materially sensitive context, the question of rights in the body is hardly a product of idle curiosity. *See also* Evan Hill et al., *How George Floyd Was Killed in Police Custody*, N.Y. TIMES (May 31, 2020), www.nytimes.com/2020/05/31/us/george-floyd-investigation.html [perma.cc/MS6X-4PB5] (describing the infamous history of a racial discrimination's victim George Floyd, whose attorney Ben Crump now advocates for Henrietta Lacks' family).

grounds with all other people – those lucky to be born without bodily deviations.

Part III of this article demonstrates that the concept of the body is not only limited to body parts that belong to a person from birth or that are inextricably linked to their body. This article will describe, from a comparative standpoint, the progressive theory of the functional body (this theory, since its inception in Germany, has been well ahead of the technological development of society).[8] Further, this paper depicts how the functional body theory has provided a solid basis for granting "body status" to objects of the material world (such as prosthetics) that, although not attached to the human body, perform the functions inherent to each human body.

Part IV will demonstrate that the functional body theory, while being a serious step forward, is only a reflection of the slow evolution of body perception, which cannot adequately respond to the demands of the present time. In contrast to this understanding, this article proposes a revolutionary view of the human body that will guarantee the status of the human body to objects that, typically, perform an abnormal and/or unusual function for an individual– helping to overcome bodily inequalities created by nature. In addition, no less legal protection will be given to those objects that, although not currently performing a function important to the human body, are potentially reserved for performing it in the future. The new theory of bodiliness reaches its apogee in the concept of reversible body, which is based on the respect of the very will of person and allows the recognition as their body even for those parts that were previously unwittingly separated from them and attached to other persons. Finally, this theory of bodiliness argues that one and the same body can be inherent in several persons by virtue of the same or different categories of bodiliness. Therefore, the new approach to the human body makes it possible to protect, effectively on equal footing, all persons who have a bodily interest in a certain body part.

Lastly, Part V establishes that a revolution in understanding the human body also promotes a revolution in understanding gender. This allows for a description of a person's decisions about their gender in bodily terms. Based on the new theory of bodiliness, it becomes possible to recognize gender as part of the human body by virtue of an attached bodiliness, and to confer the force of acts of bodily self-determination on a person's decision about their gender. This paper argues that a bodily qualification of gender will provide an unprecedented level of protection for transgender people. Lastly,

8. *See infra* notes 106-118 and accompanying text (highlighting the key points of the German Supreme Court decision, which established the theory of functional human body).

this paper brings forth for the first time a dogmatic rationale for why decisions about gender, made by gender-fluid people, should be respected (despite their fluctuating expression of gender).

II. BOUNDARIES OF THE HUMAN BODY: DISMANTLING THE NOTION OF HUMAN BODY PARTS

The human body is a highly complex biological organism that evolved over time. Its evolution occurred even before the emergence of complex social structures, the state, and science.[9] From that time to the present day, the human body has not undergone any major changes that would be visible to the naked eye of a lawyer.[10] This fundamental stability of the body is not something out of the ordinary. Rather, it is fully in line with the natural course of things. Typically, any evolutionary process is quite lengthy.[11] As an organism becomes more complex, the time required for its decisive transformation increases.[12] Due to these laws of nature, and up

9. Homo sapiens, which is anatomically identical to the phenotypes of modern humans, and which is also referred to in science as "early modern human" or "anatomically modern human", is thought to have arisen approximately 300,000 years ago. *See* Simon Neubauer et al., *The Evolution of Modern Human Brain Shape*, 4 SCIENCE ADVANCES 1, 1-9 (Jan. 24, 2018) (explaining the homo sapiens and the evolution of the human brain). *See also* Aurélien Mounier & Marta M. Lahr, *Deciphering African Late Middle Pleistocene Hominin Diversity and the Origin of Our Species*, 10 NATURE COMMC'NS 1, 11 (Sep. 2019) (stating the last genetic common ancestral population of all living humans may have lived more than 260,000 years ago); *Cf*. Eleanor M.L. Scerri et al., *Did Our Species Evolve in Subdivided Populations across Africa, and Why Does It Matter?*, 33 TRENDS IN ECOLOGY & EVOLUTION 582, 582-83 (2018) (discussing the recent change of view on the date of modern homo sapiens' origin).

10. Michael Greshko, These Early Humans Lived 300,000 Years Ago—But Had Modern Faces, National Geographic (June 7, 2017), www.nationalgeographic.com/history/article/morocco-early-human-fossils-anthropology-science [perma.cc/357Y-73DU] (writing that the face of homo sapiens sample find more than 300 000 years ago is "the face of somebody you could cross in the metro").

11. *But cf. How Long Does Evolution Take?*, AM. MUSEUM OF NATURAL HIST., www.amnh.org/exhibitions/darwin/evolution-today/how-long-does-evolution-take [perma.cc/C8WT-Q56W] (last visited May 27, 2022) (arguing that some new species or varieties arise in a matter of years or even days).

12. When discussing the duration of human evolution related to adaptation to the environment, we should pay attention to the case of the Bajau people living in Southeast Asia, which, as far as can be judged, is one of the most recent cases of evolution, *see* Melissa A. Ilardo et al., *Physiological and Genetic Adaptations to Diving in Sea Nomads*, 173 CELL 569, 569-80 (2018) (noting that it took its members at least a thousand years of swimming-focused life at sea to adapt their bodies to unusually deep and long dives under water). *See also* Anna Gislén et al., *Superior Underwater Vision in a Human Population of Sea Gypsies*, 13 CURRENT BIOLOGY 833, 834 (May 13, 2003) (emphasizing "an unusually strong diving reflex" of Bajau people in Philippines and Ama in Korea

until recently, people were forced to live with the bodies that were given to them, with no hope of changing them.[13] To compensate, people tried to enhance their physical form through exercise.[14] But, such a way of working with one's own body could not significantly help one, especially if one was born with, or had acquired injuries to the body that were considered irreversible.[15] Recently, however, mankind has made a dramatic leap forward in terms of body-related sciences, namely, modern technological advances in biology,[16] physics[17] and chemistry.[18] This progress allows humans to create their body on par with nature,[19] and overcome the limits of the body's own generic and individual nature. Artificial body parts, such as devices, mechanisms and equipment, that have been created

---

and Japan), *see* Iman Hamid et al., *Rapid Adaptation to Malaria Facilitated by Admixture in the Human Population of Cabo Verde*, 10 ELIFE 1, 1 (Jan. 4, 2021), www. doi.org/10.7554/eLife.63177 (reporting that it took at least 20 generations for Cape Verdean people to acquire resistance to malaria). These studies support the thesis that human evolution, at least in a limited way, can occur relatively quickly. However, the word "relatively" is the key word, since 1000 years or 20 generations is hardly a fast evolutionary timeframe when viewed from the perspective of a single human life.

13. *See generally* James Chambers & Peter Ray, *Achieving Growth and Excellence in Medicine*, 63 ANNALS OF PLASTIC SURGERY 473, 473-78 (Nov. 2009) (discussing the development of modern anatomical surgery).

14. *See, e.g.,* Lucas Caldas et al., *Multicomponent exercise training is effective in improving health and behavior indicators in Brazilian elderly women: A non-randomized trial*, 29 J. OF BODYWORK AND MOVEMENT THERAPIES 40, 40 (Jan. 2022) (highlighting the improvement of bodily physical characteristics and aging slowdown in the selected group of Brazilian elderly women).

15. Physical exercises have a therapeutic effect only in respect of some common injuries such as muscle pull and strain, wrist sprain etc. *See* Jesse Lieberman, *Therapeutic Exercise*, MEDSCAPE (Nov. 29, 2018), https://emedicine.medscape.com/article/324583-overview [perma.cc/75GF-XRR8] (describing physiologic aspects of physical exercises treatment).

16. *See generally* Rajani Singh et al., *Will Development of Human Anatomy Revolutionize Medical Education?*, 34 The FASEB J. 1,1 (Apr. 17, 2020) (stating that the development of human anatomy sciences may lead to a better understanding of the human body structure, and to an improvement of medical education).

17. Physical sciences provided a great basis for understanding the human body mechanism. *See* Emily Willingham, *New Brain Implant Transmits Full Words from Neural Signals*, SCI. AM. (July 15, 2021), www.scientificamerican.com/article/new-brain-implant-transmits-full-words-from-neural-signals/ [perma.cc/TWK5-V8FR] (reporting the invention of mechanism able to translate human brain neural signals into understandable words).

18. *See generally* Mihaela Pertea, *The Human Transcriptome: An Unfinished Story*, 3 GENES 344, 344-60 (June 29, 2012) (reporting the development in the realm of human DNA transcription, which clarifies the bodily structure on the chemical level).

19. *See Human–Robotic Interfaces to Shape the Future of Prosthetics*, 46 EBIOMEDICINE 1, 1 (2019) (arguing, among other things, that due to human–robotic interfaces, bionic body parts, and cutting-edge medicine, humans of the future are imagined to be capable of easily recovering from very severe injuries).

outside the human body – but have been attached to the body to become its part[20] – have been the key role in changing the characteristics of the human body.[21] The law must scrutinize and define the legal statuses of artificial body parts and the evolving body revolution,[22] particularly, in light of increasing complexity of the human body.[23]

A. Natural Body Parts and Artificial Body Parts: Illusive Distinction

The guiding principle in determining the legal status of artificial body parts is the degree of attachment – the strength of the connection between the artificial part and the human body.[24] For instance, there is a widespread belief that devices which are not incorporated into the body organically, but instead can be easily removed from the human body, do not become the human body.[25] Such artificial parts are separable from the body, and so even if they

20. This definition avoids indicating the purpose of using artificial parts as restoration of the lost part, although, historically, this was the purpose for which prostheses were created and used. *See* DAVID T. MITCHELL & SHARON L. SNYDER, NARRATIVE PROSTHESIS: DISABILITY AND THE DEPENDENCIES OF DISCOURSE 6-7 (2000). *Cf. generally* KATHERINE OTT ET AL., ARTIFICIAL PARTS, PRACTICAL LIVES: MODERN HISTORY OF PROSTHETICS (KATHERINE OTT ET AL. EDS., 2002) (arguing that in the past, this forced, and thus limited, use of prosthetics was justified because the technology of the past allowed only complex and uncomfortable artificial body parts), *but see* DAVID WILLS, PROSTHESIS 141 (1995) (averring that in the present and future, body prosthetics will not be the exception, but rather the new paradigm of the body).

21. *See generally* EMMA HUDDLESTONE, PROSTHETICS: ENGINEERING THE HUMAN BODY 1 (2019) (emphasizing the high and invaluable importance of prosthetics for the enhancement of human body).

22. The biotechnology revolution obviously also presupposes a fundamental reconsideration of the view on the human body. *Cf.* FRANCIS FUKUYAMA, OUR POSTHUMAN FUTURE: CONSEQUENCES OF THE BIOTECHNOLOGY REVOLUTION 7 (2003) (claiming that the biotechnology revolution is fraught with "the possibility that it will alter human nature and thereby move us into a 'posthuman' stage of history").

23. *See* Marie Fox, *What is Special about the Human Body?*, 7 L., INNOVATION & TECH. 206, 210 (2015) (concluding that in the context of new prosthetic technologies, the former concept of the body, naturalistic and limited, must give way to a new, more complex concept). For an example of the new body concept, *see* Gowri Ramachandran, *Assault and Battery on Property*, 44 LOY. L.A. L. REV. 253, 256 (2010) (considering the speculative example of the smartphone as a human exo-brain).

24. *See, e.g.*, HELMUT HEINRICHS IN: PALANDT BGB, 53rd ed. 1994, § 90 recital 3 (Ger.) (arguing that objects not firmly attached to the human body shall be deemed to be its parts).

25. Such an approach found many proponents among the scholars and judges. *See* GERHARD RING IN: NK-BGB, 4th ed. 2021, § 90 recital 26 (Ger.) (concerning dentures). *See also* Amtsgericht [AG] Koblenz, 1990 Zeitschrift für Schadensrecht [ZfS] 339 (Ger.) (regarding wooden legs).

have not been actually separated from it, they retain their proprietary status and continue to belong to the person who had ownership of them before they were attached to the body.[26] If an artificial part has been permanently attached to or implanted into the human body, the artificial part then becomes a part of the body and loses its proprietary status, sharing the legal fate of the human body.[27] There is the belief that an object permanently attached to a body changes its status. However, this belief can be viewed in the light that right of appropriation of implants implanted in the human body after someone's death is not granted to that

26. 1 PAUL-HENRI STEINAUER, LES DROITS RÉELS 57 (5th ed. 2012) (Switz.), 1 HEINZ REY, DIE GRUNDLAGEN DES SACHENRECHTS UND DAS EIGENTUM 26 (3rd ed. 2007); *see also* ARTHUR MEIER-HAYOZ, BERNER KOMMENTAR, 1981, ZGB § 641 at 73 (Switz.) (stating that unseparated wooden legs are property, not body); *see* OLIVER KÄLIN, DER SACHBEGRIFF IM SCHWEIZERISCHEN ZGB 106 (2002) (Switz.) (regarding wooden legs and other separable prostheses).

27. JÜRGEN ELLENBERGER IN: PALANDT BGB, 80th ed. 2021, § 90 recital 3 (Ger.); ERWIN DEUTSCH & ANDREAS SPICKHOFF, MEDIZINRECHT, at recital 618 (7th ed. 2014) (Ger.); *see also* Landgericht [LG] Mainz, 1984 MedR 199, 200 (Ger.) (concerning implanted pacemaker); Oberlandesgericht [OLG] Bamberg, 2008 NJW 1543, 1544 (Ger.) (concerning implanted golden teeth and quoting in favor of its approach Karlhans Dippel in: StGB. Leipziger Kommentar, 12th ed. 2009, § 168 recital 37 (Ger.)), *Cf. also* Adolf Laufs & Emil Reiling, Schmerzensgeld wegen schuldhafter Vernichtung deponierten Spermas? 1994 NJW 775, 775-6 (Ger.) (averring that only those objects that stand in complete unity with the human body, shall be conceived of as human body).

In France, the same position is taken by Cass. 1re civ., Dec. 11, 1985, Bull. civ. I, no. 348 (regarding dental prosthesis), *see also* TGI Lille, Apr. 21, 1981, Gazette du Palais, 1983, No. 205, note X. Labbée (concerning dental prosthesis and stating that "les objets non encore intégrés à la personne de ceux qui, comme les prothèses médicales, font partie intégrante de la personnalité de l'individu dès lors qu'ils sont posés" [objects not yet inserted into the human body, like medical prostheses, do not form part of a person's identity until they are inserted]). *See* CA Douai, Mar. 20, 1985, Juris-Classeur Périodique, 1985, 20: 365 (noting that implanted prosthesis follow the nature of human body via *accessorium sequitur principale* rule). Also, in France, the prosthesis is designated as *personne par destination* [part of a person by virtue of its destination]. Xavier Labbée, *L'Homme Robotisé, in* L'HUMAIN ET ES PROTHÈSES: SAVOIRS ET PRATIQUES DU CORPS TRANSFORMÉ [ONLINE] at para. 9 (CNRS Éditions 2017) (Apr. 21, 2021, 10:31 a.m.) (Fr.).

The same position prevails in the Netherlands. *Vraag en Antwoord, Eigendomsrechten van een Patient op Lichaamsdelen en Vreemde Voorwerpen*, 23 NEDERLANDS TIJDSCHRIFT VOOR GENEESKUNDE 973, 973-74 (1970). *See also* Viviane Missoul, *Eigendom en Hergebruik van Kunstmatige Organen*, 49 JURA FALCONIS 242, 245 (1985) (arguing that human body and accessories implanted into it, are excluded from the patrimonial sphere, quoting Josephus Maeijer, Transplanteren van Organen en het Privaatrecht, 6 Tijdschrift voor Privaatrecht 153, 156 (1969)); Bernhard Sluyters, *De Pacemaker en het Recht*, 9 METAMEDICA 317, 317-78 (1982) (concerning implanted and unseparated pacemaker).

The concept of *personne par destination* also occurs in Switzerland, *see* 1 STEINAUER, *supra* note 26, § 67 at 28 (mentioning implanted external dentures, dental fillings, pacemakers).

individual's heirs,[28] rather the appropriation of an implant is granted to close relatives of the deceased individual.[29] Ordinarily, the property belonging to the deceased (including implants, if qualified as property) is to be transferred to its heirs.[30] So, if, at the time the artificial body parts were attached to the human body, they did not change their (proprietary) status, then there would be no reason not to transfer them, among other assets of the deceased, to the heirs.

Some authors in the literature maintain a dubious view that a strong connection between the artificial part and the body, itself, is not necessary for qualifying the attachment as part of the body.[31] This means that even if the attached object can be separated from the body without much difficulty, it will be recognized as a body.[32] It is difficult to agree with such a position, as it fundamentally contradicts the very concept of an artificial bodily part. An artificial body part, by its phraseology and substance, implies attachment to the body, creating a single organism. In our understanding, the general rule should be that an object, being a foreign entity in relation to the body, cannot become part of the body until it is built into it.

Another criterion for whether an object becomes an artificial part of the body that is rarely discussed is the function that the artificial part performs.[33] In Germany, it is possible to encounter

---

28. DIETMAR WEIDLICH IN: PALANDT BGB, 80th ed. 2021, § 1922 recital 37 (Ger.); Wilhelm Weimar, *Zum Aneignungsrecht am Herzschrittmacher des Erblassers*, 1979 JURISTISCHE RUNDSCHAU [JR] 363, 364, *contra* KARL-HEINZ GURSKY IN: STAUDINGER BGB, Neubearb. ed. 2011, § 958 recital 4 (Ger.); JÜRGEN ELLENBERGER IN: PALANDT BGB, 71st ed., § 90 recital 11 (Ger.); AXEL STEIN IN: SOERGEL BGB, 13th ed., § 1922 recital 22 (Ger.).

29. LUDWIG ENNECCERUS & HANS CARL NIPPERDEY, ALLGEMEINER TEIL DES BÜRGERLICHEN RECHTS, at § 121 II 1 (15th ed. 1959) (noting that, being implants property of the deceased, it would be inherited by its heirs); *cf.* OLG München, 1976 NJW 1805 (Ger.) (stating that human body of the deceased, in contrast to property, is not subject to inheritance procedure); JOACHIM JICKELI & MALTE STIEPER IN: STAUDINGER BGB, Neubearb ed. 2012, § 90 recital 49 (Ger.) (arguing that human body is not property and no person has right of ownership in its body).

30. Bernhard Goergens, *Künstliche Teile im menschlichen Körper*, 1980 JR 140, 141-3; KLAUS VIEWEG IN: JURIS PRAXISKOMMENTAR BGB [JURISPK-BGB], 9th ed. 2020, § 90 recital 15 (Ger.)

31. *See* Roger Nerson, *Les Droits Extrapatrimoniaux* 131 (1939) (PhD dissertation) (on file with the Université de Lyon); Xavier Dijon, *Le Sujet de Droit en son Corps: Une Mise à l'Épreuve du Droit Subjectif* § 986 (1982) (PhD dissertation) (on file with the Université de Namur). *See also* Aurel David, *Réflexions pour un Schéma de l'Homme*, 7 APD 103 (1959); Aurel David, Les Biens et Leur Évolution, 7 APD 165 (1963) (stating in each paper that this approach is most suitable for the goals of modern transplantology).

32. Nerson, *supra* note 31, at 131; Dijon, *supra* note 31, at § 986.

33. JOACHIM KRETSCHMER IN: ANWALTKOMMENTAR STGB, 2011, § 242 recital 16 (Ger.).

the belief (present in literature) that not only a strong and firm connection of a thing with the body is required to be recognized as an artificial part, but also a function of replacing an organ of the human body.[34] Generally, the definition of artificial body parts exclude supplementary implants, as such implants merely supplement, or support, the existing body part (*Supportiv-Implantate*),[35] which may include implants such as pacemakers. A more correct and prevailing position in the literature is one that rejects the ridiculous division into supporting and replacing a body organ and instead qualifies both supporting and replacing implants as part of the body.[36]

It seems that both viewpoints suffer from the same flaw: a lack of understanding of the nature of the human body. Such dogmatism translates an outdated teleological and mechanistic paradigm, in which everything in the human body must necessarily have a specific useful (and, in the case of the replacement theory, irreplaceably useful) function.[37] However, this is wrong both from the perspective of biology, which is familiar with useless body parts (e.g., ear muscles),[38] and from the perspective of law, which seeks to provide the greatest possible level of protection to each individual (particularly an individual's choice regarding their own body).[39] Whatever is attached to a person's body by virtue of their own free will must be recognized, without further requirement, as a human body, for it is an act of bodily self-expression.[40] Such logic corresponds to the current realities, where many non-functional aesthetic prostheses are just as popular as active prostheses.[41]

34. Christoph Safferling & Simon Menz, *Sonderbare Vorkommnisse im Krematorium*, 2008 JURA 382, 383 (Ger.).

35. NIKOLAUS BOSCH IN: SCHÖNKE/SCHRÖDER STGB, 30th ed. 2019, § 242 recital 10 (Ger.); Hans-Friedrich Brandenburg, *Wem Gehört der Herzschrittmacher?* 1984 JUS 47 (Ger.); Goergens, *supra* note 30, at 141.

36. Gunnar Duttge in: Dölling/Duttge/Rössner StGB, 3rd ed. 2013, § 242 recital 8 (Ger.).

37. Kretschmer, *supra* note 33, at § 242 recital 16.

38. *See* Willet Rotzell, *Some Vestigial Structures in Man*, 72 Scientific Am. 375, 375 (1895) (qualifying ear muscles as atavism).

39. *See* Arseny Shevelev & Georgy Shevelev, *Proprietary Status of the Whole Body of a Living Person*, 86 RabelsZ (forthcoming October 2022) (on file with authors) (explaining, with reference to supporting authorities, that the law shall grant the individual's choice in respect of their own body at the highest level as possible).

40. A well-known case of self-expression are bodypiercings, which is quite common in society. However, if tattoos are sometimes prohibited in some legislation, then piercings will share the same fate there. *See* TGI Paris, June 3, 1969, D. 70 (Fr.) (prohibiting the transaction of tattooing as that which uses the body as the object of a contract). *See also* Anne Fagot-Largeault*, Ownership of the Human Body: Judicial and Legislative Responses in France, in Ownership of the Human Body* 116 (Jos V.M. Welie & Henk A.M.J. ten Have eds., 1998) (Neth.) (discussing the oddness of the TGI Paris, June 3, 1969, D. 70 decision).

41. *See* Claire Fraser, *An Evaluation of the Use Made of Cosmetic and*

Studies show that many people feel incomplete in the absence of a cosmetic prosthesis,[42] as if a part of their body had been taken away.[43] Thus the disfigurement becomes a serious obstacle to making new social contacts.[44] In other words, it is precisely an aesthetic prosthesis that makes people with disfigurement feel as if their body is complete.[45] In such situations, the socio-political

Functional Prostheses by Unilateral Upper Limb Amputees, 22 Prosthetic and Orthotic Int'l 216, 216 (1998) (emphasizing that non-manipulative prostheses are used as actively as functional ones), *Cf.* Bartjan Maat et al., *Passive Prosthetic Hands and Tools: A Literature Review*, 42 Prosthetic and Orthotics Int'l 66, 67 (2018) (noting that despite the underdeveloped nature of passive prostheses, in relation to active ones, many people though continue to use them). *See Prosthesis*, Am. Cancer Soc'y, www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/prostheses.html [perma.cc/VR6V-G5J2] (reporting the popularity of aesthetic prostheses used instead of natural limbs lost due to cancer); *Reconstruction Mammaire*, Institut National du Cancer, www.e-cancer.fr/Patients-et-proches/Les-cancers/Cancer-du-sein/Reconstruction-mammaire [perma.cc/2HRZ-HXDA] (last visited Feb. 6, 2022, 1:52 AM) (noting the high demand on aesthetic prostheses in case of mastectomy due to cancer).

42. *See Cosmetic Prostheses for People with Limb Loss*, The Australian Orthotic Prosthetic Ass'n, www.aopa.org.au/documents/item/724 [perma.cc/BXU3-XN4E] (last visited May 28, 2022, 2:03 PM) (describing cosmetic prostheses including, among others, replacing limbs, hands and feet, facial or breast prostheses, and internal prostheses such as joint replacements).

43. *See* DAVID HARRIS, *Types, Causes and Physical Treatment of Visible Differences*, VISIBLY DIFFERENT: COPING WITH DISFIGUREMENT 79, 81 (1997) (accenting a high level of stress and dissatisfaction). *See also* Tom Millard & Lynn Richman, *Different Cleft Conditions*, 38 CLEFT PALATE CRANIOFACIAL J. 68, 70 (2001) (reporting that cleft-affected children are more at risk than their non-cleft peers for elevated anxiety, general unhappiness, and self-doubt). *See* Samantha Turner et al., *Psychological Outcomes amongst Cleft Patients and their Families*, 50 BRIT. J. PLASTIC SURGERY 1, 7 (1997) (finding that 73% of their sample felt their self-confidence had been very much affected by their cleft). Moreover, cleft is sometimes likely to cause people commit a suicide. *See* ANTONY HERSKIND ET AL., *Cleft Lip: A Risk Factor for Suicide*, PROCEEDINGS OF THE ABSTRACT OF THE SEVENTH INT'L CONGRESS ON CLEFT PALATE AND RELATED CRANIOFACIAL ANOMALIES 156 (1993) (reporting a doubled suicide rate amongst Danish adults with clefts).

44. *See* Nichola Rumsey & Diana Harcourt, *Body Image and Disfigurement: Issues and Interventions*, 1 BODY IMAGE 83, 83-84 (2004) (highlighting that a visible difference comprises a "social disability," since the body defects are likely to be noticed by other people), *see also* Turner et al., *supra* note 43, at 8-9 (writing that in 60% of cases people with disfigurements experience difficulties in making social contact because they are perceived as imperfect by their interlocutors), Emma Robinson, *Psychological Research on Visible Differences in Adults*, VISIBLY DIFFERENT: COPING WITH DISFIGUREMENT 102-11 (Ronald Lansdown et al. eds. 1997) (reporting difficulties relating to meeting new people, making new friends, and the resulting concerns about developing longer term relationships).

45. *See* Burcu Burçak et al., *Quality of Life, Body Image, and Mobility in Lower-Limb Amputees Using High-Tech Prostheses: A Pragmatic Trial*, 64 ANNALS OF PHYSICAL AND REHAB. MED., 1, 5 (2021) (stating that aesthetic prostheses improve the body image of a person and lead to its satisfaction);

context demands that non-functional cosmetic implants be recognized as having a similar status to their active counterparts.[46] Not recognizing passive prostheses, such as an artificial eye, arm, or finger, implanted for beauty purposes as a human body, contradicts the social expectations of both the person with disfigurements and others who perceive them. Both categories of persons (people with or without malformations) perceive this implant as a natural body part, and the law cannot ignore their intrinsic expectations. Accordingly, there is a sole duplex requirement for implants to be recognized as a body part, consisting of subjective and objective elements (a person's will).[47] In turn, a narrow understanding of artificial body parts can deprive an individual of essential legal means provided by law for the protection and redress of violated rights to the body.[48]

The recognition of an object as an artificial body part entails the most important consequences of a civil and criminal law nature. In criminal law, it should be noted that an encroachment on attached artificial body parts would be considered an encroachment on the body, and the harm caused to it would be an injury to health,[49] not harm to property.[50] From a civil law perspective,

---

Nicola Cairns et al., *Satisfaction with Cosmesis and Priorities for Cosmesis Design Reported by Lower Limb Amputees in the United Kingdom: Instrument Development and Results*, 38 PROSTHETIC AND ORTHOTICS INT'L 467, 468-69 (2014) (stating in respect of prostheses that satisfaction is associated with the individual's body image), *cf.* Susan Roberts et al., *External Breast Prosthesis Use: Experiences and Views of Women with Breast Cancer, Breast Care Nurses, and Prosthesis Fitters*, 26 CANCER NURSING 179, 180 (2003) (noting that women that have undergone mastectomy and implanted artificial breast felt that they maintained their femininity, normality, and body image and that breast prosthesis improved the quality of their life); Simone Glaus & Grant Carlson, *Long Term Role of External Breast Prostheses after Total Mastectomy*, 15 BREAST J. 385, 390 (2009) (reporting that satisfaction level remained high in those women who used an artificial breast rather than in ones not following the same course of action).

46. *See supra* notes 42-45 and accompanying text.

47. An act of self-determination (subjective criterion), and the quality of permanent attachment of implant to the human body (objective criterion).

48. *See infra* notes 76-86 and accompanying text (discussing the Oscar Pistorius case).

49. *See* BRIGITTE TAG, DER KÖRPERVERLETZUNGSTATBESTAND IM SPANNUNGSFELD ZWISCHEN PATIENTENAUTONOMIE UND LEX ARTIS. EINE ARZTSTRAFRECHTLICHE UNTERSUCHUNG 119-21 (2000) (equating the harm to an attached artificial body part to the bodily injury), *see also* Bernhard Hardtung, *Die Körperverletzungsdelikte*, 2008 JuS 864, 864 (Ger.) (explaining that harm to a pacemaker is characterized as an injury to health), *e.g.,* CA Aix-en-Provence, Oct. 1, 2015, No. 14/12662 (Fr.) (stating that the destruction of a hearing aid is the destruction of a prosthesis that forms part of a person, and therefore this crime is a crime against a person (*préjudice corporel*) and not property).

50. Some courts look more broadly at the concept of property and qualify as theft the removal of a gold tooth from a human body. *See* Hoge Raad, 25 juni

artificial body parts are subject to a privilege that is difficult to overstate. Once something has been attached to the body it is excluded from the circle of objects that can be foreclosed, due to the termination of ownership in the attached object.[51] A foreclosure on the objects attached to the human body would look completely inconceivable and absurd.[52] However, there are cases supporting this. Some courts, contrary to common sense, formally and rigidly applying the rules of the current legislation,[53] allowed the recovery of dentures directly from the jaw of the patient.[54] However, cases of this kind should be distinguished from cases involving the recovery of dentures which have not been embedded in the person. In such a case, the dentures do not become part of the person, rather they remain property;[55] Therefore, they do not enjoy the immunity that law grants to the human body.[56] The problems with the proper

1946, N.J., 1946, 503 (deciding with respect to a dead body, but the basic thesis of the decision fits the living body: what is not property under civil law can still be the subject of theft). *Cf.* Cass. crim., Oct. 25, 2000, No. 00-82.152 (Fr.) (holding that dentures were the property of the wearer before their death and, after that moment, the property of their heirs, and could be the subject of theft). *See also* Thierry Garé, *Les Objets Laissés dans une Sépulture ne sont pas Abandonnés*, 13 D. 1052, 1053 (2001) (quoting Cass. crim., Oct. 25, 2000, No. 00-82.152 and adhering to its approach).

51. In France, the recovery of dentures for debt has repeatedly been refused on the grounds that they are part of the person, *see supra* note 27 and accompanying text (discussing the French case law following this approach). In the same spirit is the doctrine in the Netherlands, which denies a person whose organs have been transplanted into another person (and were, in that sense, artificial to the recipient) the right to recover them due to termination of ownership of the donor in them. Erna Guldix, *De Impact van de Medische Wetenschap en Techniek op bet Personen- en Gezinsrecbt*, 57 RECHTSKUNDIG WEEKBLAD 1113 (1993-94); 1 Henricus J.J. Leenen et al, Handboek Gezondheidsrecht. Rechten van Mensen in de Gezondheidszorg 49 (2007); Herman Nys, *Eigendom in het Medisch Recht*, RECHTSKUNDIG WEEKBLAD 2357, 2371 (1984).

52. *See, e.g.*, Genrichus C.J.M. Hamilton van Helst, *De eigendom van Bartstimulatoren, een Probleemverkenning*, 4 TIJDSCHRIFT VOOR GEZONDHEIDSRECHT 186, 192 (1983) (Neth.) (concluding personal rights prevailed over an implanted pacemaker).

53. Code de Procedure Civil Article L.511-1 (Fr.) (allowing retention of property belonging to a debtor to secure the debt and to induce the proper performance of obligation).

54. *See* CA Douai, Oct. 14, 1983, JCP 1985.II.20365, obs. X. LABBEE; Nov. 16, 1983, RTD Civ. 1985.454, obs. R. PERROT (Fr.) (allowing *saisie conservatoire* [retention of a thing to secure payment of a debt] of a prosthesis in a patient's mouth).

55. *See* TGI Lille, Apr. 21, 1981, Gazette du Palais 1983, 2, 416, note Ph. BERTIN (Fr.) (allowing a dentist to foreclose an unpaid and uninserted denture).

56. Some, however, extend immunity from recovery not only to what is truly an artificial part of the human body, but also to assistive devices. *See* Sylvie Cimamonti, *L'Effectivité des Droits du Créancier Chirographaire en Droit Contemporain* 547 (1990) (PhD dissertation) (on file with the Université d'Aix-

qualification of actions performed in relation to artificial body parts, as well as the situations in which these actions are performed, are due to the difficulty of correct and precise definitions of the legal status of the artificial part. The true definition of artificial body part status should reflect the balance of conflicting interests of proprietary and personal nature belonging to different persons.

Artificial body parts, from the moment they are incorporated into the body, must be regulated in the same way as natural body parts.[57] Until then, artificial body parts, being ordinary things,[58] are subject to general rules of applicable property law. The transition of an object from the status of a "thing" to the status of an "artificial body part" does not, in itself, cause problems. But, problems arise when such a part (e.g., implant) belongs to a person other than the one of which it will become a part.[59] Does the fact that the implant became part of the person mean that the proprietary interest of the person to whom it belonged is irrevocably and irreversibly lost? The complete destruction of a third party's pecuniary interest, due to the transformation of their own implant into a part of another person's body, should clearly not be in the third party's interest. This is especially noticeable in situations where the implant is made of a valuable metal (such as gold), which can be put back into economic circulation, and the person in whom the implant was embedded is deceased.[60] To protect the uncompensated interest of the implant

---

Marseille III) (arguing foreclosure may not be imposed upon glasses, contact lenses and hearing devices). *See also* CA Paris, June 19, 2020, No. 18/03104 (finding plaintiff was correctly denied recognition of the glasses breakage as an accident at work, due to lack of bodily injury).

57. This rule should be applied even in the most convoluted and contentious situations. Thus, the question posed by Xavier Labbée, *La Gueule de l'Autre*, 12 D. 801, 801-2 (2006) (Fr.), whether the commitment of a crime by a person to whom the face of another deceased person has been transplanted (and that face has become a person's prosthesis) is capable of injuring the dignity of the deceased and the feelings of their relatives, we would answer in the negative. We answer like this because to that person, the rules of the natural person should apply, whose commission of the crime has not, at this time, injured the dignity of persons other than the offender themselves.

58. It should be remembered that some artificial parts may be special and regulated accordingly in a special way. *See* Sara Gerke, *Die Klinische Translation von hiPS-Zellen in Deutschland*, *in* DIE KLINISCHE ANWENDUNG VON HUMANEN INDUZIERTEN PLURIPOTENTEN STAMMZELLEN 243, 291 (Sara Gerke et al. eds, 2020) (Austria) (stating that artificially created organs made from organic material are subject to the same restrictions imposed by transplant laws (including those related to trade) as naturally obtained organs); Christian Kopetzki et al., *Die Klinische Translation von hiPS-Zellen in Österreich*, *in* DIE KLINISCHE ANWENDUNG VON HUMANEN INDUZIERTEN PLURIPOTENTEN STAMMZELLEN 329, 362-3 (Sara Gerke et al. eds., 2020) (Austria).

59. Exemplifying may be a case of prosthesis theft when a thief incorporates the stolen implant into one's own body.

60. *See, e.g.,* Hoge Raad, June 25, 1946, N.J., 1946, 503 (Neth.) (holding the unauthorized removal of gold teeth from the body of the deceased as a crime of

owner, many individuals suggest that the moment an implant is incorporated in a person should not affect the third party's proprietary right. This proprietary right, according to their view, should continue in effect, and be restored in full from the moment the implant ceases to be part of a living person's body.[61] Others propose to leave aside the determination of the legal status of the implant until the death of the bearer, since the determination of the status during this period is "debatable."[62] Concurrently, individuals claim to recognize that, upon the death of the person, implants automatically become separate objects,[63] which opens the possibility for a third party to regain ownership. Such escapism, which should hardly be welcomed, once again proves that the existing old problem requires a new solution.

The essence of the previous solutions was that the ownership in the artificial part attached to the human body did not disappear, but merely "fell asleep" and was awakened when the artificial part became property again. The preservation of ownership for the time of attachment to the person was a logically necessary and unavoidable step, because otherwise it would be impossible to consistently and coherently explain why a third party would have ownership in another person's detached body part (even if it were artificial). This third party (former owner of an object implanted into another person) would be as alien, in respect of the separated body part, as any seller in respect to the thing sold. The unfortunate result of such theoretical constructions was the breaking of the holistic conception of human: human beings transformed into a set of parts that were subject to fundamentally different rights.[64] Another evident problem of past theories is slavery, in which an individual would become, albeit in part, under ownership of another. This directly contradicts human dignity and the values of modern civil society.

The solution proposed is the concept of abstract ownership in an artificial body part. We have already debunked existing views on body ownership in our article in a leading European journal, *Rabels Zeitschrift*, providing an extensive comparative analysis of previous theories and offering (to the best of our knowledge, for the first time)

---

theft).

61. *See, e.g.*, Peter Bringewat, *Die Wiederverwendung von Herzschrittmachern*, 1984 JA 61, 63 (Ger.) (providing justification for this approach); Bernd-Rüdeger Sonnen, *Der Diebstahl nach § 242 StGB*, 1984 JA 569, 570-1 (Ger.).

62. Matthias Jahn & Markus Ebner, Fortgeschrittenenklausur - Strafrecht: Nürnberger Zahngold, 2008 JuS 1086, 1087 (Ger.).

63. *Id.*

64. *See* Joachim Kretschmer, *Das Tatbestandsmerkmal "Sache" im Strafrecht*, 2015 JA 105, 108 (Ger.) [hereinafter Kretschmer, *Sache*] (noting the discrepancy between the theory of ownership in bodily parts and the holistic concept of the human being).

a brand new and dogmatically coherent justification of ownership in human body.[65] A new dogma was named an abstract ownership in the human body. An abstract right can be understood as a proprietary right, extending directly to an abstract object.[66] All phenomena would only be a concretization[67] of this abstract object (which will not cease to exist even when its concretization changes). Replacement of the concretization of the abstract object does not change the very right that extends to the object.[68] The abstractness of the object allows one to exclude the recognition of a living person as a concrete object of ownership.[69] But, at the same time, the abstractness of the object does not detract from the very existence of ownership, and even allows us to make dispositions of ownership. Subsequently, the peculiarity of abstract ownership in this case is

65. *See* Shevelev & Shevelev, *supra* note 39.

66. It may seem that if a right extends to an abstract object rather than to a thing, then it is not real (proprietary). However, the right should not extend to a thing, because it is a phenomenon of an ideal order, so the object must also be ideal, not material. The proprietary (real) character of the right extending to an abstract object is not lost if "realism of notions" (*Begriffsrealismus*) is admitted, as suggested by Sokolowski. PAUL VON SOKOLOWSKI, DIE PHILOSOPHIE IM PRIVATRECHT: SACHBEGRIFF UND KÖRPER IN DER KLASSISCHEN JURISPRUDENZ UND DER MODERNEN GESETZGEBUNG 400 (1902) (Ger.).

67. The concretization of the abstract object of the proprietary right is very similar in meaning and sound to the Scottish institution of attachment, through which the floating charge, which does not apply to a particular thing, was "attached" and became a fixed charge when the debtor was in default. *See* Alisdair McPherson, The Attachment of the Floating Charge in Scots Law 22 (2017) (PhD dissertation) (on file with the University of Edinburgh) (explaining the essence of attachment as a moment and process); Nat'l Com. Bank of Scot. v. Liquidator of Telford, Grier Mackay & Co. Ltd. 1969 SLT 306, 313 (Scot.).

68. The change in the concretization of an object, which preserves the right that extends to an abstract object, is very similar to the institution of proprietary surrogation (*dingliche Surrogation*), with the difference however that proprietary surrogation replaces one thing with another, relying on the fact that the new thing has been acquired at the expense of the old, , *see* Oberster Gerichtshof [OGH] 8Ob139/07k (Austria) (defining the notion of proprietary surrogation). *See also* BERNHARD ECCHER IN: ABGB PRAXISKOMMENTAR, Michael Schwimann ed., 3rd ed. 2005, § 613 recital 3 (explaining that proprietary surrogation has long been applied in this form in Austrian inheritance law and quoting Supreme Court decisions OGH SZ 41/136 and OGH 2 Ob 631/86). Thus, in the case of proprietary surrogation, many things may substitute the place of a perished thing as an object of right. *See, e.g.*, ANDREAS KLETECKA, ERSATZ- UND NACHERBSCHAFT 305 (1999) (Austria) (concerning insurance compensation); and JAN LIEDER IN: MÜKOBGB, 8th ed. 2020, § 1127 recital 1 (Ger.). *See also* EGON WEIß IN: KLANG ABGB III, 2nd ed., at 407, 419-20 (Austria) (regarding compensation for expropriation); and CHRISTOPH SCHÄRTL IN: BECKOK BGB, 57th ed. 2021, § 1212 recital 5 (Ger.) (regarding proceeds from the sale of collateral). The doctrine of proprietary surrogation has no sound dogmatic justification, unlike the one proposed in the RabelsZ paper. On the weaknesses of proprietary surrogation theory, Shevelev & Shevelev, *supra* note 39.

69. Shevelev & Shevelev, *supra* note 39.

that it is not conditional. It exists, producing a legal effect in full measure even before the death of a person or separation of a part of their body (can even have a market value.

Concretization,[70] as applied to the human body, works in a way that from the moment the body or its part ceases to be the receptacle of the human person (what is excluded from circulation), abstract ownership is seemingly attached to an object that has just arisen, not excluded from the economic market. This is because previous ownership had an abstract connection with that object, and as soon as concrete ownership became possible on it, it automatically belongs to the abstract owner. Concretization can manifest itself, for example, at the moment of an individual's death, when their body ceases to be connected with their person.[71] Therefore that individual's heirs, if any, would have inherited abstract ownership (if it was not transferred to someone during the testator's lifetime), and receive the property which concretizes it–a human body.

After a brief digression into the notion of abstract ownership, this paper may describe how abstract ownership theory can be applied to resolve the issue of when an implant, owned by one person, is incorporated into the body of another. Before this implant was attached to the human body of another person, the object in question belonged to a third party and served as a concretization of the object of abstract ownership of that third party. As soon as it was incorporated into the human body of another person, this implant ceased to be a concretization of the object of abstract ownership, so that concrete ownership ceased to extend to it. However, ownership itself has not ceased to exist, because with the loss of concretization the abstract object and, with it, ownership, do not cease to exist, as the abstract object does not need concretization.[72] Simultaneously, as soon as the artificial part of the

70. *See id.* (discussing the phenomenon of concretization).

71. *Id.*

72. Consequently, from the moment the artificial part is attached to the body, any proprietary and similar effects aimed at the ownership will not directly affect the object. In this context, the following example, previously suggested in the literature, is interesting. A prosthesis placed instead of a hand uses software installed on the prosthesis by the manufacturer. What happens if the person wearing the prosthesis decides to hack the arm to install software not covered by the license agreement (to do a so-called jailbreak)? Can the company do for this violation of the agreement what it usually does for other "devices" - to turn the device into a "brick", to deprive it of its functionality by making it a piece of useless material? *See* Ramachandran, *supra* note 23, at 256. The author of the example concludes that such a thing would constitute a battery with respect to the person using the prosthesis. *Id.* In our understanding, if a prosthetic with software has been incorporated into the body, then, if the relationship to the use of the software is governed by a license agreement and that agreement is violated, the company has the right to impose measures of any severity on the violator. However, they must refer to the violator's abstract ownership of the prosthesis, and so any penalties will only be

person becomes property again, it again becomes a concretization of the object of the abstract ownership that did not cease to exist. The reason is that this ownership, having something akin to a "claim" to this artificial body part as a future property, will be a stronger right than any other right that seeks to engage the artificial part into its orbit. This concept serves as the best explanation of how to protect the rights of a person whose stolen body part has been attached to another person without, at the same time, allowing ownership in the recipient of the part in question.

B. The Natural-Artificial Dichotomy as an Engine of Discrimination

This paper's description of the legal status of artificial body parts would be incomplete if it did not address the issue of discrimination against people with artificial body parts. The prohibition against unequal treatment of the rights falling into the same category is of almost axiomatic character.[73] If an artificial

able to physically affect the prosthesis from the moment it becomes the concretization of an object of abstract ownership, that is, when it no longer is a human body, but not earlier. It is noteworthy that the controversies between body holders and the holders of rights in devices implemented into the human body may soon reach an unbelievable number due to rapidly growing technological progress. *See Neuralink: Elon Musk Unveils Pig with Chip in its Brain*, BBC NEWS, www.bbc.com/news/world-us-canada-53956683 [perma.cc/CCU8-2KQ4] (Aug. 29, 2020) (reporting that Musk's success as to the pig is a first step to achieve the same success as to the human). This kind of device is expected to be in considerable demand, as this technology promises to cure many human diseases, *see* Lauren Golembiewski, *Are You Ready for Tech That Connects to Your Brain?*, HARV. BUS. REV. (Sept. 28, 2020), www.hbr.org/2020/09/are-you-ready-for-tech-that-connects-to-your-brain [perma.cc/2JBP-VHRU] (reporting the treatment of spinal cord injuries by such brain chips); Helen Mayberg, *A Cloud Has Been Lifted: What Deep-Brain Stimulation Tells Us About Depression and Depression Treatments*, BRAIN AND BEHAV., (Sept. 17, 2018), www.bbrfoundation.org/content/cloud-has-been-lifted-what-deep-brain-stimulation-tells-us-about-depression-and-depression [perma.cc/9FF7-2V56] (reporting the treatment of depression by such brain chips). *Cf.* Susan Schneider, *Should you add a microchip to your brain?*, N.Y. TIMES, (June 10, 2019), www.nytimes.com/2019/06/10/opinion/future-artificial-intelligence-transhumanism.html [perma.cc/UX2G-BLUA] (describing new useful functions of brain chips, such as integrated calculation).

73. In the practice of the Council of Europe countries, this axiom was reflected in equal treatment of persons in "an analogous or relevantly similar situation," *see* Ünal Tekeli v. Turkey, Eur. Ct. H. R., App. No. 29865/96, § 49 (Nov. 16, 2002); Nat'l & Provincial Bldg. Soc'y, Leeds Permanent Bldg. Soc'y and Yorkshire Bldg. Soc'y v. U.K., Eur. Ct. H. R., App. Nos. 21319/93, 21449/93 and 21675/93, § 88 (Oct. 23, 1997). Inequality may only be excused, and not amount to discrimination in the event there was "objective and reasonable justification" for that. Konstantin Markin v. Russia, Eur. Ct. H. R., App. No. 30078/06, § 125 (March 22, 2012); Stec and Others v. U.K., Eur. Ct. H. R., App. No. 65731/01, § 51 (Apr. 12, 2006); Raalte v. Neth., Eur. Ct. H. R., App. No.

body part has been permanently attached to the body, it does not differ essentially from the natural body itself.[74] Both the natural and artificial parts may be separated from the body with a higher risk of harm to health (in comparison with easily detachable dentures), but with a competent and appropriate medical procedure can be organically reattached to the body.[75] Otherwise, we would be confronted with the resenting phenomenon of discrimination. Discrimination against people with artificial body parts is often caused by the denial or mere outward adherence to the principle of full equality of artificial and natural body parts.[76] The most telling example of logic tampered by the prejudice of inequality of body parts is the perception of artificial body parts in sports.

The case of runner Oscar Pistorius, who was missing parts of his legs, is quite famous, and illustrative of the perception of artificial body parts in running.[77] However, he did not want to be a Paralympian,[78] rather he wanted to participate on equal footing with the "able-bodied" participants. Therefore, he decided to run in special prosthetics to compensate for his disability.[79] The Court of Arbitration for Sport heard Pistorius' case,[80] and found that it could not be determined that the prosthesis created a clear advantage for the athlete compared to other participants in the races.[81] Although

---

20060/92, § 39 (Feb. 21, 1997). In the United States, the Equal Protection Clause plays the same role. *See infra* Section IV.A.

74. See *supra* notes 42-47 and accompanying text (discussing the similarity between natural and artificial body parts from the sociological perspective).

75. *Replantation*, AM. ACADEMY OF ORTHOPEDIC SURGEONS, www.orthoinfo.aaos.org/en/treatment/replantation/ [perma.cc/GV9Z-XSYF] (last visited May 29, 2022, 12:15 PM) (defining replantation as "surgical reattachment of a body part (such as a finger, hand, or toe) that has been completely cut from the body"). *See also* Georg Mattiassich et al., *Long-term Outcome Following Upper Extremity Replantation After Major Traumatic Amputation*, 18 BMC MUSCULOSKELETAL DISORDERS 1, 1 (2017) (reporting that successful replantation after major upper extremity amputation is possible in 77–93% of cases).

76. *Cut and Loss: When Disability Strikes*, DISABILITY CREDIT CANADA (Nov. 30, 2016), www.disabilitycreditcanada.com/amputation-cut-loss-disability-strikes/ [perma.cc/VP4J-DW5K] (defining amputation as "disabling and all-encompassing, inflicting [...] social discrimination"). *See also* Kathleen Kraft and Catherine E. Shoichet, *Did Park Discriminate Against Girl With Prosthetic*, CNN (July 22, 2015), www.edition.cnn.com/2015/07/21/us/oklahoma-girl-prosthetic-leg-water-park/index.html [perma.cc/F777-DMXH] (reporting the discrimination against young girl in water park based on her prosthesis),

77. *Paralympics History*, INT'L PARALYMPIC COMM., www.paralympic.org/ipc/history [perma.cc/GZ9H-DM7Y] (last visited May 30, 2022, 12:13 AM).

78. *See id.* (defining a Paralympian as an athlete with an impairment and providing a definition of Paralympic games).

79. *See generally* CAS 2008/A/1480 Pistorius v/ IAAF 1, 1-14 (2008) (describing, among other things, the decision of Oscar Pistorius to participate in the Olympiad with a prosthesis).

80. *Id.*

81. *Id.* at 53-54.

in this case, the prosthesis was not implanted in Pistorius (the prosthesis was removable, and not part of his body), the court's analysis regarding prosthesis can be relevant to our examination of the human body's legal status.[82]

Interestingly, the court, in explaining which prosthetic devices create a prohibited advantage, gave no attention to the fact that the devices could be implanted into a person and become part of their body. Instead, the court emphasized the improvement in the athlete's physical performance resulting from the use of some device of artificial nature.[83] The latter point could be used against athletes with artificial body parts.[84] This paper argues that if a person implants an artificial part into their body, it should be perceived (unconditionally and without dispute) as if it had been with them from birth. Consequently, whatever a person implants in their body, their act of determination to change their body will be essential, and they cannot be restricted, for example, from competing on an equal footing with other athletes.[85] Even if, objectively, a physical

82. Some authors have speculated about the implications of what would have happened had the prosthesis been implanted in Pistorius, *see* Shawn M. Crincoli, *You Can Only Race if You Can't Win? The Curious Cases of Oscar Pistorius & Caster Semenya*, 12 TEX. REV. ENT. SPORTS L. 133, 182 (2011) (writing that outside he would look like every other runner, but inside he would possess some "less than" or "more than" human characteristics propelling his locomotion).

83. A similar emphasis on the benefit arising from the use of technical aids is common to other courts. *See* PGA Tour, Inc. v. Martin 532 U.S. 661, 682-83 (2001) (siding with a disabled person who requested to be allowed to use a technical device (special machine) to move around the golf course to compensate for his mobility problems, saying that such measures should not result in an advantage over other athletes). Other courts, following the rule in this decision, have also considered whether the measure they have authorized would create an "advantage" on the handicapped person's side, *see* Kuketz v. Petronelli, 821 N.E.2d 473 (Mass. 2005) (dismissing an appeal of a footless man seeking to get permission to return the ball in a racquetball game after the second bounce, as such permission would fundamentally alter the nature of this game). The doctrine also supports the development of "clear rules" to calculate when an advantage arises on the side of the person using prosthetic devices, *see* Alexis Chappell, *Running down a Dream: Oscar Pistorius, Prosthetic Devices, and the Unknown Future of Athletes with Disabilities in the Olympic Games*, 10 N.C. J.L. & TECH. 16, 26-27 (2008).

84. The literature has previously explored the permissibility of limiting the rights of athletes with prosthetic devices in the context of the rules governing the advantage gained using prostheses. *See* Christopher Bidlack, *The Prohibition of Prosthetic Limbs in American Sports: The Issues and the Role of the Americans with Disabilities Act*, 19 MARQ. SPORTS L. REV. 613, 633-66 (2009) (stating that analysis of a prosthetics ban in American sports has shown that such a ban will likely be upheld by the courts).

85. A prohibition on competition addressed to athletes like Pistorius would violate their right to dignity, *see, e.g.*, Antonio Buti, *Sport and the Law: Pistorius: Reaching His Capabilities*, 35 ALTERNATIVE L. J. 46, 47 (2010) (highlighting the unlawfulness of such prohibition). Limiting the rights of persons with artificial body parts is essentially the same as attempting to

advantage were to arise over other athletes, the law should not attach importance to this, just as it does not attach importance to natural advantages. If a naturally gifted person (i.e. a one having better physical conditions from birth) has the right to compete on an equal footing with others who do not have the same physical attributes,[86] then no less can compete on equal terms with other participants a person who chooses to correct nature's deficiencies and to give a bodily advantage to themselves.[87]

C. Separated Body Parts: Where the Body Ends

To properly determine the legal status of natural body parts as well as artificial body parts, which, from the moment of accession, are satisfied with the identical status as the former, it is necessary to implement a meaningful dichotomous division of parts based on their separateness. According to this dichotomy, all parts of the human body are either separated or not separated. Only the separated parts received a special meaning and status from these parts, for which there is a rational explanation. Until the moment of separation, all parts of the human body are not something independent, separate, and share a single status with the entire human body as a whole. Accordingly, the undetached body parts are not considered to be things or property.[88]

---

control their bodies, *see* Jonathan Liljeblad, *Foucault, Justice, and Athletes with Prosthetics: The 2008 CAS Arbitration Report on Oscar Pistorius*, 15 INT'L SPORTS L. J. 101, 110 (2015) (noting this restriction of disabled persons' rights). *See also* Isabel Karpin & Roxanne Mykitiuk, *Going Out On A Limb: Prosthetics, Normalcy and Disputing The Therapy/Enhancement Distinction*, 16 MED. L. REV. 413, 427 (2008) (stating that criticism of Pistorius' use of prosthetics represents an inadequate view of the technologically-modified human body); *Contra* Particia J. Zettler, *Is it Cheating to Use Cheetahs?: The Implications of Technologically Innovative Prostheses for Sports Values and Rules*, 27 BU INT'L L. J. 367, 391 (2009) (justifying the validity of banning prostheses if they create an advantage for their user).

86. *See* Erin Buzuvis, *Hormone Check: Critique of Olympic Rules on Sex and Gender*, 31 WIS. J. L. GENDER & SOC'Y 29, 43 (2016) (providing a long list of abnormal physical attributes that arise naturally and confer a physical advantage that still does not preclude an athlete from competing).

87. The purpose of sport is self-improvement (in the context of Pistorius), *see* Peter Charlish & Stephen Riley, *Should Oscar Run?*, 18 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 929, 954-55 (2008) (emphasizing the importance of this aim). Assuming this, changing one's own body through prosthetics is not condemnable, as the path to earning one's own advantage and perfection and improving one's body is different for each individual.

88. *See* Carl Gareis, *Allgemeines Staatsrecht*, in 1 Marquardsen's Handbuch des Öffentlichen Rechts, at 33 (1884) (Ger.) (reporting this approach in old German law); 1 Konrad Cosack, Lehrbuch des Deutschen bürgerlichen Rechts 139 (1898) (Ger.); Erwin Deutsch & Andreas Spickhoff, Medizinrecht, at recitals 609, 611-2 (5th ed. 2003) (Ger.) (following this view from the current German law standpoint); Otto Depenheuer in: v. Mangoldt/Klein/Starck GG, 5th ed.

The most striking case regarding the legal status of undivided body parts is *Regina v. Bentham*.[89] This case considered whether a person could be found to have committed an offense by imitation of a weapon when the main element of the imitation was an arm.[90] The lower courts answered in the affirmative, while the House of Lords rejected such and pointed out that no one can possess what is not separated from him.[91] Lord Bingham pointed out that a human's hand and fingers are not separated from a human, therefore, they cannot be possessed.[92] Such a cogent and comprehensible forming rationale for why one cannot consider one's own body as a weapon was followed by another argument showing the absurdity of such a qualification. Lord Bingham pointed out that if it were possible for the purposes of the law governing the commission of a crime with a weapon to recognize fingers or hands as weapons, then the court could decide to take possession of the weapon from the offender to the police.[93] However, the latter argument, while certainly persuasive and strong, is rather misguided and constitutes the well-known logical trick of fake limiting the possible choices: "Either we do not recognize the finger as a weapon, or we have to confiscate it." In fact, there are more options and it is likely that in such a case the Lord's opponents would have applied a teleological reduction of the law.

The fact that many people did not fall for this trick (or, more likely, were simply not familiar with it) has led to an abundance of practice recognizing body parts as "weapons." For example, in *In re D.T*, the court, in proving that a person committed a crime while being in possession of a dangerous weapon, pointed out that it saw

---

2005, Art. 14 recital 144 (Ger.). Accordingly, until a part of the body has been separated, classical theory does not permit a transfer of rights to it, *see* Erwin Riezler, *Arbeitskraft und Arbeitsfreiheit in Ihrer Privatrechtlichen Bedeutung*, 27 Archiv für bürgerliches Recht [ArchBürgR] 219, 240 (1906) (Ger.) (providing justification for the classical theory approach regarding separated body parts). Even at the obligation level, it is considered that a contract is not made in relation to such a part of the body, but in relation to a future property that will arise after separation from the body of the person, *see* Francesco Carnelutti, *Problema Giuridico della Trasfusione di Sangue*, 4 Il Foro Italiano 103, 103 (1938) (It.) (exemplifying with blood flowing from the body). However, if we accept our theory of abstract ownership in the body, it would be permissible to transfer rights to the undivided parts even before separation. The reason is that abstract ownership is only concretized at the moment of separation, but exists even before that moment.

89. Regina v. Bentham [2005] UKHL 18; [2005] 1 WLR 1057 (Eng.)

90. *Id.* at 1.

91. *Id.* at 8.

92. *See id.* (Lord Bingham of Cornhill, majority) ("[a]n unsevered hand or finger is part of oneself. [t]therefore one cannot possess it). *See also id.* at 14 (Lord Rodger of Earlsferry, majority) (quoting Ulpian's famous statement in support of this thesis that no one can have a right of ownership in themselves).

93. *Id.*

nothing strange in allowing "possession of teeth".[94] To avoid being attacked by opponents, the court stated that it did not follow its prior decision that any person that broke into someone else's home would be considered to have committed the intrusion with a dangerous weapon (teeth, which are always with the person).[95] The court noted this was because teeth are only weapons when they are "intended to be used" respectively.[96] The court in *Shaw v. State*– whose logic might be an interesting objection to the main thesis of *Regina v. Bentham* – noted that it did not need to establish the presence of a separate weapon, but only needed to establish the presence of a "means likely to produce death or serious bodily harm".[97] This practice, contrary to its prevalence,[98] does not inspire confidence. Further, it does not hold water not only for reasons of intuitive rejection of the unnatural qualification of teeth, fists, and the like as weapons, but also because of a failure to explain how a person can be a "means" used by themselves. Therefore, it is more convincing the case law which does not allow to see in undivided parts of the human body an object of possession, *inter alia*, weapons.[99]

---

94. In re D.T., 977 A.2d 346, 352 (D.C. 2009).

95. *Id.* at 354.

96. *Id.*

97. Shaw v. State, 139 So. 3d 79, 90 (Miss. Ct. App. 2014) (citing Jackson v. State, 594 So. 2d 20, 24 (Miss. 1992)) (recognizing teeth as a weapon and addressing the issue of recognizing a person's fists as weapons).

98. *See* State v. Neatherlin, 141 N.M. 328, 334-35 (N.M. Ct. App. 2007) (concluding that a jury could reasonably determine that the human mouth is a deadly weapon if the mouth is used in a manner that could cause death or great bodily harm); *see* United States v. Sturgis, 48 F.3d 784, 788 (4th Cir.1995) (finding that the teeth of an HIV-positive person may be considered a weapon); *see also* United States v. Moore, 846 F.2d 1163, 1168 (8th Cir.1988) (holding possibility of AIDS transmission by means of a human bite "too remote" in a legal context "to support a finding that the mouth and teeth may be considered a deadly and dangerous weapon in this respect"); *e.g.,* Brock v. State, 555 So.2d 285, 287-88 (Ala. Crim. App. 1989) (stating that teeth can be a deadly weapon but ruling that no evidence was presented that the biting in this case had the capacity to result in serious physical injury).

99. *See* Commonwealth v. Davis, 10 Mass. App. Ct. 190, 192-8 (Mass. App. Ct. 1980) (refuting the admissibility of qualifying a human body part as a weapon); *See also* People v. Owusu, 93 N.Y.2d 398, 405 (N.Y. 1999) (holding that teeth, a body part, do not constitute an "instrument" under the statute); *see* Ransom v. State, 460 P.2d 170 at 172 (stating that bare hands and feet cannot be qualified as weapons); *see also* Dickson v. State, 230 Ark. 491, 492 (1959) (finding that feet with shoes as an ordinary apparel is not a weapon); *see* Reed v. Commonwealth, 248 S.W.2d 911, 914 (Ky. 1952) (concluding that hands and feet are not deadly weapons); *see* State v. Calvin, 209 La. 257, 265-6 (1945) (stating that "no authority of law [...] which classifies one's bare hands or teeth as a dangerous weapon"); *e.g.,* People v. VanDiver, 80 Mich. App. 352, 356-57 (1977) (reaching the same conclusion on bare hands); *see also* People v. Vollmer, 299 N.Y. 347, 350 (1949) (saying that a dangerous weapon is "something quite different from the bare fist of an ordinary man); *see* State v. Wier, 22 Or. App.

III. EVOLUTION OF THE BODY CONCEPT: REVIEWING THE THEORY OF FUNCTIONAL BODY

As mentioned previously, separated parts of the human body have a special status. However, that analysis exclusively focused on the state of separateness.[100] This approach may have been correct in the past,[101] but it should be reconsidered. In the phrase "separated body parts," the concept of the body is as important as the criterion of separateness. Without a definition of what the body is, it is impossible to say what the separated parts from the body are. Defining the concept of the body may seem, at first glance, uncomplicated.[102] But, such an impression is deceptive and conditioned by the everyday view of legal concepts, which identifies the biological body with the legal body of a person. For the sake of fairness, it should be noted that the separation of the legal concept of the body from the biological one is a product of recent times. The separation of the legal concept of the human body is explained by revolutionary social[103] and technological[104] changes in society. These changes provided practical prerequisites for the human being: (1) going beyond an individual's natural body, and (2) updating the old, narrow concept of the human body. Although there has not been a revolution in the understanding of the body in

549 (1975) (saying that a dangerous weapon is different from the bare hand of an ordinary man).

100. *See supra* II.C (discussing the separateness as a criterion of body parts).

101. *See, e.g.,* ROHAN HARDCASTLE, LAW AND THE HUMAN BODY 145-172 (2007) (discussing the notion of detached body parts and its significance).

102. *See, e.g., Human Body*, ENCYCLOPEDIA BRITANNICA, www.britannica.com/science/human-body [perma.cc/WL97-MSY3] (last visited May 30, 2022, 9:48 AM) (defining the human body as "the physical substance of the human organism, composed of living cells and extracellular materials and organized into tissues, organs, and systems"). The law, however, cannot boast of the same progress in defining the concept of the human body. *See* Paolo Zatti, *Verso un Diritto per la Bioetica: Risorse e Limiti del Discorso Giuridico*, 1 RIV. DIR. CIV. 43, 43-4 (It.) (emphasizing the inability of the law to define the concept of the human body).

103. The end of racial segregation in the USA was indeed a great progress in championing truly democratic values of omni-equality, *see, e.g.,* Brown v. Board of Education of Topeka, 347 U.S. 483 (1954) (holding educational segregation unconstitutional, bringing the "separate-but-equal" education era to an end); Civil Rights Act (L. 88–352, 78 Stat. 241, enacted July 2, 1964) (legally ending the segregation institutionalized by Jim Crow laws); Voting Rights Act of 1965, Pub. L. 89-110, 79 Stat. 437 (overcoming legal barriers at the state and local levels that prevented African Americans from exercising their right to vote).

104. *See, e.g.,* Clyde Barker & James Markmann, *Historical Overview of Transplantation*, 3 Cold Spring Harbor Perspectives in Medicine 1, 1-15 (2017) www.doi.org/10.1101/cshperspect.a014977 (highlighting the development of transplantation science in the 20th century).

jurisprudence to this date, some bold (though unintentional) advances in the understanding of the body have taken place, most notably in the concept of the functional human body.

A. Developed Phase: German[105] Approach

The theory of the functional body was first developed by the German Supreme Court in the famous case of reproductive male cells.[106] In this case, the male plaintiff was undergoing treatment for cancer.[107] He knew that continued treatment would cause him to lose his reproductive capacity, so he decided to provide his sperm for cryopreservation[108] before treatment began.[109] Subsequently, because of the clinic's negligence, the sperm was destroyed.[110] The clinic acknowledged the negligence of its actions, and was prepared to compensate for the breach of duty of care.[111] However, the clinic did not fail to take advantage of the weaknesses of German tort law.[112] It indicated that it would not pay moral damages for the plaintiff's suffering from the loss of his procreative capacity, as there was no statutory basis for claiming this harm.[113] The German Supreme Court had to find a basis for damages to a person who surrendered his sperm for procreative purposes under a storage contract, in accordance with the rules of § 847 BGB,[114] which only provided for moral damages in cases of damage to the human body and human health.[115] The Court, in awarding moral damages for

105. For a helpful guide explaining the meaning of all German legal abbreviation to be used in this paper see GERMAN LAW RESEARCH, HARVARD LAW SCHOOL LIBRARY (last updated Mar. 30, 2022) guides.library.harvard.edu/GermanLaw [https://perma.cc/S3MD-W5J6] (providing for an English-written guide on German legal abbreviations).

106. *See* BGH, 9 Nov. 1993, VI ZR 62/93 (describing for the first time the concept of the functional body).

107. *Id.* at 2.

108. Sperm cryopreservation ("sperm freezing") is a technique principally used to store sperm in safe conditions for patients undergoing cancer therapy and play a vital role in treating couples with infertility, *see generally* Hamoun Rozati et al., *Process and Pitfalls of Sperm Cryopreservation*, 6 J CLINICAL MED. 1, 2 (2017) (reporting the high viability of sperm stored by this technique).

109. BGH, 9 Nov. 1993, VI ZR 62/93 at 4.

110. *Id.*

111. *Id.*

112. Bürgerliches Gesetzbuch [BGB] (German Civil Code) § 253 (establishing the basis for damages claim).

113. BGH, 9 Nov. 1993, VI ZR 62/93 at 4.

114. BGB § 847 (repealed as of 1 August 2022) (setting out the grounds for moral damages claim).

115. Such an action is explained by the fact that moral damages cannot be compensated without an express statutory provision. In contractual claims (including those relating to semen storage), no compensation for moral damages is possible. *See* Gottfried Schiemann, *Schmerzensgeld bei Fehlgeschlagener Sterilisation*, 1980 JuS 709, 713 (Ger.) (explaining the rationale of this rule);

injury to the body, deduced that spermatozoa taken to restore eventual reproductive capacity loss were "no less important to the bodily integrity of a person and their right to self-determination and self-realization, than the bodily parts directly attached to them."[116] The Court went beyond determining the legal status of the plaintiff's sperm and established the famous rule on functional body.[117] According to this rule, any body part taken from a person at their will in order to be later reunited with them is considered a functional body until it is reunited, since that body part is intended to preserve or realize the functions of the body as a whole.[118]

The theory of the functional body has been widely discussed and widely endorsed in literature and case law. Many, in determining the legal status of separated body parts in property law, point out that they become things and property only when they are finally separated (e.g., hair, teeth, and donor organs).[119] But if they are intended to be returned back to the body (e.g., autologous blood), the legal regime of the human body continues to apply to separated parts, contrary to the physical separation from the

---

Karl Larenz & Claus-Wilhelm Canaris, Lehrbuch des Schuldrechts II/2, at 590 (13th ed. 1994) (Ger.). Such a strange restriction of contractual liability as compared to tort liability has been criticized as "factually unreasonable". Hans Stoll, Haftungsfolgen im Bürgerlichen Recht 16 (1993). Some authors have called for a revision of such a rule, *see* Peter Schlechtriem in: 2 Gutachten und Vorschläge zur Überarbeitung des Schuldrechts 1654-6 (1981) (Ger.) (arguing in favor of compensation of moral damages caused in contractual relations). However, given that the norm of § 253 BGB is not considered imperative by some court and scholars, (BGH, 1955 JZ 581; Heinrich Honsell, *Die Misslungene Urlaubsreise - BGHZ 63, 98*, 1976 JuS 222, 225 n.27), there have been some attempts to subsume non-pecuniary damage under compensation in the contractual relationship if the contractual relationship was directly aimed at satisfying the personal, intangible interests of the creditor, *see* Hans Stoll, Kommentar, *BGH Jan. 8, 1975, VIII ZR 126/73*, 1975 JZ 252, 255; Karsten Küppers, Verdorbene Genüsse und vereitelte Aufwendungen im Schadensersatzrecht 152-4 (1976) (Ger.); Franz Braschos, Der Ersatz Immaterieller Schäden im Vertragsrecht 69-71, 230-2 (1979) (Ger.).

116. BGH, 9 Nov. 1993, VI ZR 62/93 at p. 9.

117. *Id.* at 7-8.

118. *Id.*

119. *See, e.g.*, FG Niedersachsen, BeckRS 2009, 26028117 (Ger.) (concerning blood serum). *See also* Erwin Deutsch & Andreas Spickhoff, Medizinrecht, at recital 613 (5th ed. 2003) (Ger.) (describing the separation as the fact making body part property); Jessica Schmidt in: Erman BGB, 16th ed. 2020, § 90 recital 5 (Ger.). *See also* Markus Parzeller & Hansjürgen Bratzke, Rechtsverhältnisse am Menschlichen Körper unter Besonderer Berücksichtigung einer *Kommerzialisierung der Organ- und Gewebetransplantation*, 2003 Rechtsmedizin 357, 358 (Ger.) (arguing that once separated the body part becomes property unless aimed at the later reuniting with the whole body); WOLFGANG BREHM & CHRISTIAN BERGER, SACHENRECHT 26-27 (3rd ed. 2014) (Ger.) (writing that a body part, not intended by its source to be reunited, or that is not capable of later reuniting, is to be considered property); CHRISTIANE WENDEHORST IN: MÜKOBGB, 8th ed. 2021, EGBGB Art. 43 recital 19 (Ger.) (same as finding in Brehm & Berger).

body.[120] This paper agrees that the harm caused to the separated parts must qualify as harm to the human body, considering that these separated parts, on the basis of their purpose,[121] continue to be part of the body.[122]

However, this innovative approach became the object of harsh criticism and disapproval from a wide range of theorists who hold outdated views.[123] Proponents of this concept are convinced that the human body can be considered only that which is not physically separated from the body.[124] If the parts of the body are separated from the body, then they must be treated as things.[125] This decision has even become the subject of jokes. For example, Taupitz writes that the German Supreme Court has done with the law what was previously available only in the tales of the saints – the simultaneous presence of the body in different places

120. DEUTSCH & SPICKHOFF, *supra* note 27, at recital 613.

121. *See* LUTZ MICHALSKI IN: ERMAN BGB, 12th ed. 2008, § 90 recital 5 (Ger.) (highlighting the decisiveness of the purpose of separation in the legal qualification of both the status of separated bodily parts and the acts committed in relation to them); RENATE SCHAUB IN: PWW BGB, 3rd ed. 2008, § 823 recital 24 (Ger.).

122. *See, e.g.,* York Schnorbus, *Schmerzensgeld wegen Schuldhafter Vernichtung von Sperma*, 1994 JUS 830 (arguing harm to sperm falls into the category of bodily harm); ANSGAR STAUDINGER IN: HK-BGB, 10th ed. 2019, § 823 recital 7 (Ger.). *Cf., e.g.*, WERNER LÜCKE IN: PRÖLSS/MARTIN VVG, 31st ed. 2021, at AHB Abs. 1, Ziff. 1, recital 35 (Ger.) (arguing that this conclusion also applies in insurance cases); CLAUS VON RINTELEN IN: SPÄTE/SCHIMIKOWSKI HAFTPFLICHTVERSICHERUNG, 2nd ed. 2015, at AHB Abs. 1, Ziff. 1. recital 136 (Ger.).

123. *See* THOMAS PFEIFFER IN: LINDENMAIER/MÖHRING, NACHSCHLAGEWERK DES BUNDESGERICHTSHOFS. BGH, URTEIL VOM 09-11-1993 - VI ZR 62/93, at § 823 (Aa) Nr. 151 Bl. 3 (Ger.) (arguing that this solution dilutes the concept of the human body); Wolfgang Nixdorf, *Zur Ärztlichen Haftung Hinsichtlich Entnommener Körpersubstanzen: Körper, Persönlichkeit, Totenfürsorge*, 1995 ZEITSCHRIFT FÜR VERSICHERUNGSRECHT, HAFTUNGS- UND SCHADENSRECHT [VERSR] 740, 743-74 (Ger.) (averring that if the initial purpose of reuniting has changed, the legal status of such separated body part becomes uncertain); Andreas Voß, *Die Durchkreuzung des Manifestierten Familienplanes als Deliktische Integritätsverletzung*, 1999 VERSR 545, 549-51 (Ger.) (stating that the German Supreme Court should focus on the right of family planning rather than on a functional body when deciding the case of destroyed sperm)..

124. *See, e.g.*, Laufs & Reiling, *supra* note 27, at 775 (proving commentary on the famous BGH's decision on the functional body); Dominik Peris, *Anmerkung zum BGH Urteil vom 9.11.1993 - VI ZR 62/92*, 1994 MEDR 113 (Ger.).

125. It has been suggested that detached bodily parts that are intended to be reunited with the body are still things, *see* HANNS PRÜTTING, SACHENRECHT, at recital 5 (37th ed. 2020) (providing justification for this approach) *Cf.* MARINA WELLENHOFER, SACHENRECHT, at § 1 recital 20 (35th ed. 2020) (Ger.) (arguing, however, that these things are subject not only to the right of ownership but also to the personality rights, which prevail over the former).

(*Multilokation*).[126] Such a joke, however, conceals a fundamental objection to the theory of the functional body, which is that the human body, according to law, can now find itself in places and situations in which it is not universally expected to be.[127] Taupitz argues, not unreasonably, that recognition of the concept of the functional body entails a "delocalization of the body" for purposes of establishing bodily violation.[128] The logical consequence is that of such characterization, in the case of strict liability, offenders would be liable for harm to the body even when they could not have known that the object being harmed was the body.[129] As the saying goes, 'they who prove too much, prove nothing' (*qui nimium probat, nihil probat*). Such an objection should not be addressed to those who recognize the existence of a functional body. Rather, it is for those who unjustifiably expand the limits of strict liability by allowing a person to be required to pay damages when they objectively lacked a reasonable opportunity to be aware of the importance of the object to which the harm is inflicted.

The concept of the functional body has also been the subject of extensive discussion in criminal law. There is a debate in criminal law as to whether a functional body should be recognized as a body for the purpose of classifying acts against such a "body" as bodily injury (*Körperverletzung*).[130] While it was generally thought that the paragraph providing for this crime was intended to protect health and physical integrity,[131] the later interpretation of the object of the crime became such that it was seen as the core of the potential to "develop personal freedom."[132] This interpretation

126. *See* Jochen Taupitz, Der *Deliktsrechtliche Schutz des Menschlichen Körpers und Seiner Teile*, 1995 NJW 745, 746 (Ger.) (explaining the phenomenon of *Multilokation*).

127. *See supra* notes 24-26 and accompanying text (pointing out that the objects, physically located outside the human body, shall not be considered a person's body).

128. Taupitz, *supra* note 126, at 750.

129. See *Id.* (describing the basis for such liability).

130. Strafgesetzbuch (Penal Code) [StGB] § 223 (Ger.) (establishing that under the crime of *Körperverletzung*, any person who physically assaults or injures the health of another person shall be held criminally liable).

131. *See* Albin Eser, *Medizin und Strafrecht: Eine Schutzgutorientierte Problemübersicht*, 97 ZEITSCHRIFT FÜR DIE GESAMTE STRAFRECHTSWISSENSCHAFT [ZStW] 1, 3-5 (1985) (favoring the protection of physical integrity of a person); MARTIN HEGER IN: LACKNER/KÜHL STRAFGESETZBUCH, 28th ed. 2014, § 223 recital 1; HANS LILIE IN: LEIPZIGER KOMMENTAR STRAFGESETZBUCH, 12th ed. ab. 2006, Vor § 223 recital 1. *Cf.* MANFRED MAIWALD IN: 1 MAURACH/SCHROEDER STRAFRECHT BESONDERER TEIL, at § 8 recitals 3, 5 (10th ed. 2009) (reporting the debates on the aim pursued by these criminal law provisions).

132. GUNTHER ARZT ET AL., STRAFRECHT BESONDERER TEIL, LEHRBUCH, 2nd ed., § 6 recitals 1, 26; UWE HELLMANN IN: 1 KREY/HELLMANN/HEINRICH STRAFRECHT BESONDERER TEIL, 16th ed. 2015, recital 217. *But see* 2 HARRO OTTO, GRUNDKURS STRAFRECHT, at § 15 recital 2 (7th ed. 2005) (mentioning not

opened the way for some scholars to recognize that sperm and eggs (as well as other separated body parts) that are intended to be returned to the body are considered to be the object of bodily injury.[133]

The dominant view in criminal law, represented by leading experts, nevertheless, criticizes the concept of the functional body.[134] For instance, the majority view is that the "civilistic interpretation" of the body is overly broad and diverges from the general criminal law understanding of the body.[135] From such beliefs, it is deduced that criminal law has its own, isolated concept of the body.[136] This concept has no place for an unreasonable division into property and the body, depending on the will of the individual to reunite the separated part with the whole body.[137] Under this criminal law approach, in contrast to the civil law viewpoint, any separated parts of the body are property.[138] Such a

following the liberal approach as to the object of a crime of bodily injury).

133. *See* Georg Freund & Friedrich Heubel, *Der Menschliche Körper als Rechtsbegriff*, 1995 MEDR 194, 197-98 (claiming that in such case the damage to the separated body part would not constitute a crime against property); RALF ESCHELBACH IN: BECKOK STGB, 49th ed. 2021, § 223 recital 14 (calling the punishment of crimes against temporarily removed body parts under the rules of bodily injury as an exception from the general rule that harm to these parts be deemed proprietary).

134. *See, e.g.*, Friedrich-Christian Schroeder, *Begriff und Rechtsgut der "Körperverletzung"*, *in* FESTSCHRIFT FÜR HANS JOACHIM HIRSCH ZUM 70 725, at 737 (Thomas Weigend & Georg Kupper eds., 1999) (comparing the civil and criminal law concepts of human body). *See also* THOMAS FISCHER IN: FISCHER KOMMENTAR ZUM STGB, 64th ed. 2017, § 223 recital 2 (emphasizing the non-existence of a wide functional body concept in the German criminal law); Harro Otto, *Der Strafrechtliche Schutz des Menschlichen Körpers und Seiner Teile*, 1996 JURA 219 (alleging that the German Supreme Court's decision of functional body may distance civil and criminal law from each other).

135. *See* KRISTIAN KÜHL IN: LACKNER/KÜHL STGB, 29th ed. 2018, § 223 recital 1 (Ger.) (calling the civilistic interpretation of the body broad, and leading to the separation of criminal and civil body concepts).

136. *See* Kretschmer, *supra* note 64, at 107 (demonstrating the difference between civil and criminal law concepts of the human body).

137. *See id.* (arguing that the individual's will does not matter). If one is guided solely by the approach of the German Supreme Court, then, from the standpoint of protecting the interests of an individual in organs and tissues, there is indeed an unwarranted division. This is because the blood taken from a person to give it back to them would be their body part, while the donor kidney required for transplantation to a person would not be recognized as part of the body of the future recipient, *see* Hardtung, *supra* note 49, at 865 (noting the illogicality of such decision).

138. *See* Kretschmer, *supra* note 64, at 107 (arguing that criminal law deems separated body parts as property). *See also* BGH, 6 BGHSt 377, 378 (Ger.) (stating that here is a long tradition that criminal law "must follow what civil law recognizes as things and property" (and, accordingly, what it does not regard as things or property)); REINHART MAURACH IN: 2 MAURACH/SCHROEDER STRAFRECHT BESONDERER TEIL, AT § 26 II A 2A (2ND ED.) (citing 6 BGHST 377); HANS-JÜRGEN BRUNS, DIE BEFREIUNG DES STRAFRECHTS VOM ZIVILISTISCHEN

position is fundamentally flawed; its apologists fail to properly appreciate the existential importance of the goal for which the organs are separated from the person – the preservation of body functions essential to both biological[139] and social[140] life. Likely, critics of the functional body in criminal law implicitly hold that it is impossible to consider something that does not entail harm to the health of the human body as a bodily injury. This paper finds the following rhetorical question to be appropriate: If criminal law considers such "harmless" acts as cutting off beards or some hairs as a crime against bodily inviolability,[141] then how can it not, *a fortiori,* protect the more important reproductive function of the human body? To protect human rights, criminal and civil law must be united in applying the concept of the functional body as broadly as possible.

In practice, unfortunately, courts invent many ways to get around the concept of the functional body. For instance, one court asserted that the German Supreme Court in its decision used the functional body theory exclusively for the purpose of compensating the injury to the body, and in other cases it is inadmissible to proceed from the existence of a functional body.[142] Another court, proving the correctness of its restrictive interpretation, focused on the way in which separated body parts are used in relation to the whole body.[143] This court pointed out that for the separated body parts to be recognized property they shall be returned to the body in a manner comparable to surgery (for example, transfusion of autologous blood during surgery).[144] Therefore, in cases where

---

DENKEN 291-92 (1938).

139. Some authors contend that the removal of organs and other biomaterials for subsequent use is often a medical necessity rather than a spontaneous human whim, *see, e.g.*, Ajit Walunj et al., *Autologous Blood Transfusion*, 6 CONTINUING EDU. IN ANESTHESIA CRITICAL CARE & PAIN, 192, 192 (2006) (asserting that the driving force for the use of autologous blood transfusion is "to reduce the risk of transmission of infection" which may be received with the donor's blood).

140. *See, e.g.*, *Freezing Sperm*, WOMEN & INFANTS: FERTILITY CENTER, www.fertility.womenandinfants.org/treatment/fertility-preservation/freezing-sperm [perma.cc/A2DN-X8PG] (last visited June 1, 2022, 6:04 PM) (explaining how sperm preservation can save men's fertility and, thus, such a social function as the ability to continue one's lineage).

141. BGH, Sept. 25, 1952, 3 StR 742/51 (concerning cutting off a hair against another's will); BGH, July 5, 1966, 5 StR 280/66 (Ger.) (considering cutting off a hair against another's will); BERNHARD HARDTUNG IN: MÜKOSTGB, 3rd ed. 2017, § 223 recital 9 (Ger.) (regarding toenails and fingernails). *See also* Director of Public Prosecutions v. Smith [2006] EWHC 94 (Admin) (Eng.) (cutting off a bundle of hair was qualified as an injury to the human body).

142. *See* BVerwG, June 11, 1997, 3 B 130.96 (arguing that for the purpose of the German Medical Products Act, the blood aimed at autologous use shall be deemed property).

143. BayObLG, Apr. 29, 1998, 4 St. RR 12/98 (Ger.).

144. *Id.* at 72-73.

autologous biomaterials are used for therapeutic effects on the body, such as treatment of neurodermatitis by means of preparations of a person's own blood, these biomaterials lack the status of functional body and the regulations on drugs shall be applicable to them.[145]

The concept of the functional body is particularly neglected in tax law. In a case before the Cologne Court,[146] a plaintiff engaged in the medical activity of taking cartilage material from his body from which were isolated and multiplied cartilage cells (chondrocytes), then to be used for reimplantation into his body.[147] To protect himself from the tax authorities' claim that transactions with this "property" were taxable, the plaintiff argued that the cells, as separated body parts to be reimplanted into the body, could not be considered as property, and were therefore not taxable.[148] The court acted in a rather interesting way. It pointed out that the functional body decision could be limited only to the purpose of damages.[149] Although a little further down the line it did not choose to take that as the basis for resolving the situation.[150] Instead, the court indicated that tax law must abstract from civil law and may treat as property even that which is recognized as a body in civil law, since the economic function of the disputed object testifies in favor of its property character.[151] We note that such logic is extremely doubtful, as it is unreasonable to justify through the economic function the fundamental change in the status of an object. To accept this reasoning is just as well to justify slavery, since it will be accepted by the established economic function of the body of a certain person, and the fact that this is considered as "body under civil law" will not prevent taxation in the tax law. Such decisions, together with the studied doctrine, allows this paper to conclude that the revolutionary idea, openly declared by the German Supreme Court, has received neither proper recognition, nor development.

---

145. *Id.*

146. FG Köln, Dec. 19, 2006, 6 K 912/04, DStRE 2007, 965 (Ger.).

147. *Id.* at 966.

148. *Id.*

149. *Id.* at 967.

150. *Id.*

151. *Id.* A similar conclusion on the functional body can be found in Bundesfinanzhof [BFH] Apr. 1, 2009, XI R 52/07 (Ger.) (holding that the revenue from the removal of joint cartilage cells to be reimplanted into their source is tax-exempted); *see also* Case C 156/09, Finanzamt Leverkusen v. Verigen Transplantation Service International AG, ECLI:EU:C:2010:695, § 29 (Nov, 18, 2010) (reaching the same conclusion on the basis of a rather poor reasoning in comparison to the Cologne court).

B. Betwixt and Between: Halfway Approach of Other Continental Law Countries

Concepts like the functional body have emerged outside of Germany, which, although not seriously substantiated or debated, are also worthy of discussion. For instance, in France, it is commonly viewed that human organs (upon separation) continue to be in the orbit of the *persona* (*graviter dans son orbite*), and therefore have the status of the *persona* themselves.[152] The French courts, probably unfamiliar with the German concept of the functional body, invented something similar, and went much further. They went so far as to claim that a guide dog[153] can be, for a blind person, a part of the body which is a visual prosthesis.[154] Such a dog is recognized in the French doctrine as "*personne par destination"* (part of a person by virtue of destination).[155] As this paper argues for the new theory of bodiliness, the French approach is unfavorable, as it denies the independent legal status of the dog. Implementation of this approach would exclude the freedom to dispose of the dog to the same extent that a person can freely, without being subject to criminal and civil liability, dispose of their own body. The value of something to a person, including a dog, does

152. Édith Deleury, *La Personne en son Corps: l'Éclatement du Sujet*, 70 CAN. B. REV. 448, 471 (1991) (Can.); Pascal Labbée, *L'Articulation du Droit des Personnes et des Choses*, 243 LES PETITES AFFICHES 30, 32 (2002); Jean-Christophe Galloux, Essai de Définition d'un Statut Juridique 81 (1988) (PhD dissertation) (on file with the Université de Bordeaux); GLENN RIVARD & JUDY HUNTER, THE LAW OF ASSISTED HUMAN REPRODUCTION 81, 84 (2005); Lise Giard, *Les Parties Détachées du Corps Humain, des "Choses" et des "Biens" dans la Conception Contemporaine du Droit*, 11 JURISDOCTORIA 43, 52 (2014). *Accord* Paolo Zatti, *Il Corpo e la Nebulosa dell'Appartenenza. Dalla Sovranità alla Proprietà*, *in* PER UNO STATUTO DEL CORPO 71 (Cosimo Mazzoni ed., 2008) (It.); Paolo Zatti, *Principi e Forme di Governo del Corpo*, *in* TRATTATO DI BIODIRITTO 99 (Stefano Rodotà & Paolo Zatti eds., 2011) (It.).

It is similar to the statement found in the Dutch doctrine that a severed bodily part, in order to become property, must cease to be within the sphere of the personality rights of the person from whom it was severed, *see* 1 ASSER ET AL., MR. C. ASSER'S HANDLEIDING TOT DE BEOEFENING VAN HET NEDERLANDS BURGERLIJK RECHT § 58 (2006).

153. Guide, or service dogs are defined as "dogs that are individually trained to do work or perform tasks for people with disabilities." *ADA 2010 Revised Requirements: Service Animals*, US DEP'T. OF JUST. (June 12, 2011), www.ada.gov/service_animals_2010.htm [https://perma.cc/ZX95-JLZB].

154. TGI Lille, Mar. 23, 1999, D. 1999, 350; TGI Lille, June 7, 2000; Xavier Labbée, *Le Chien Prothèse*, 36 D. 750, 750 (2000). *But see* CA Paris, June 19, 2020, No. 18/03104 (denying plaintiff recognition of the glasses breakage as an accident at work, since "harm to glasses or [other external] prostheses cannot be considered as harm to the body (*dommage corporel*)").

155. Blandine Mallet-Bricout & Nadège Reboul-Maupin, *Droit des Biens: Panorama 2005*, D. 2352, 2355 (2005); CYRIL BLOCH & PHILIPPE LE TOURNEAU, PRÉJUDICE EXTRAPATRIMONIAL ch. 2125, § 2125.72 (2021-2022).

not automatically turn that something into a part of the person themselves.[156]

In some countries it is possible to find the concept of the functional body quite identical to the German one. For example, the Swiss doctrine recognizes that if an organ has been separated from the human body, but has retained functional unity with it through the purpose of autologous use, it does not lose its connection with the person and remains an organ.[157] The implementation of the functional body theory will not cause rejection from the part of the civil law corpus. This is evidenced by the prevalence in Switzerland of the concept holding that when different physical objects have a single functional purpose and have a functional connection, it is permissible to recognize them as a single object.[158] However, such an identity of concepts is exceptionally rare.

C. Germinal Stage: Common Law Approach

It is difficult to find the concept of the functional body in common law countries, but it is reasonable to say that there are at least theoretical rudiments and some legal solutions possible under an expanded understanding of the human body. In discussing the preconditions for the development of the theory of the functional body on the basis of the common law doctrine, we would, first, note the following view. One should distinguish the legal status of separated organs depending on whether the organs are removed permanently from the person, or whether they are removed temporarily in order to return them back into the human body.[159] This theory can be successfully used to justify the preservation of the bodily status of the human organ in spite of its separation from the body. The same thesis may also be evidenced by a theory, which would emphasize the importance of the will of a person from whom organs are removed in order to change the legal status of human

156. *But see* Margaret Radin, *Property and Personhood*, 34 STAN. L. REV. 957, 959 (1982) (writing that some things are seen by people as "almost part of themselves"); *see also* Samual Wheeler, *Natural Property Rights as Body Rights*, 14 NOUS 171, 181 (1980) (Fr.) and Paul Matthews, *The Man of Property*, 3 MED. L. REV. 251, 252 (1995) (writing that "what is Mine is an extension of Me, and is protected as I am").

157. Charles Joye, Génome *Humain, Droit des Brevets et Droit de la Personnalité. Étude d'un Conflit 100* (2002) (PhD dissertation) (on file with the Université de Lausanne); VINCENT CORPATAUX, L'UTILISATION DU SANG À DES FINS THÉRAPEUTIQUES. ÉTUDE DE DROIT SUISSE DANS UNE PERSPECTIVE EUROPÉENNE 201 (2012) (Switz.).

158. *See* REY, *supra* note 26, at 26 (explaining the concept of single object); MEIER-HAYOZ, *supra* note 26, at 70.

159. *See* Margaret Swain & Randy Marusyk, *An Alternative to Property Rights in Human Tissue*, 20 HASTINGS CENTER REP. 12, 13 (1990) (highlighting this distinction)

organs to that of an object of property.[160] The functional body approach can rely not only on a theoretical basis, but also on a substantial body of case law, which embodies a wider interpretation of the body.

In support of this paper's thesis, may be quoted the practice of criminal and civil battery, which, being inherently an act associated with the striking of the human body,[161] has been given a quite wider interpretation. Therefore, a person to whom the battery is inflicted may also enshrine all that is thus connected to the body, which is generally perceived as part of the person and, consequently, shares their inviolability, regardless of the weakness or remoteness of the attachment to the person.[162] In *Respublica v. Longchamps,*[163] the judge acknowledged battery where a victim had his cane dislodged from his hands, justifying it with the maxim that "[a]nything attached to the person, partakes of its inviolability."[164] The phrase "attached to a person" can mean a variety of things. In *Fisher v. Carrousel Motor Hotel Inc.,*[165] the court found a battery where a plate was ripped from a person against his will.[166] Similarly, assault was found in *S. H. Kress Co. v. Brashier*,[167] in which someone snatched a book from the victim's hands.[168] In general, any act of low impact on the body, such as snatching or pulling an object out of a person's hand gives rise to "assault and battery."[169] This interpretation of the crime against inviolability and the human body is popular[170] and is a remarkable conquest for the human body

160. *See, e.g.*, JAMES PENNER, THE IDEA OF PROPERTY IN LAW 121 (1997) (requiring not only physical separation, but also the will of the person from whom the organ is separated to part with the organ for ownership in the separated organ to occur). *See also* ROHAN HARDCASTLE, LAW AND THE HUMAN BODY 151 (2007) (citing James Penner's THE IDEA OF PROPERTY IN LAW).

161. As evidenced by the etymology of the word itself. *See* Battery Definition & Meaning, Merriam-Webster, www.merriam-webster.com/dictionary/battery [perma.cc/W2MK-GZQ5] (last visited June 1, 2022, 10:52 PM) (providing that the word battery comes from the Latin *battuō* [to beat]).

162. *See* RESTATEMENT (SECOND) OF TORTS, § 18 (1965) (stating that even an indirect offensive contact with a person is battery); FOWLER HARPER & FLEMING JAMES, THE LAW OF TORTS 216 (1956). *See also* WILLIAM PROSSER, LAW OF TORTS 32 (3d ed., West Publishing 1964) (holding that an interest in a person's integrity includes all things attached to or in contact with them).

163. Respublica v. Longchamps, 1 U.S. (1 Dall.) 111 (1784).

164. *Id.* at 114.

165. Fisher v. Carrousel Motor Hotel Inc., 424 S.W.2d 627, 629 (Tex. 1967).

166. *Id.* at 629.

167. S. H. Kress Co. v. Brashier, 50 S.W.2d 922 (Tex. Civ. App. 1932).

168. *Id.* at 924.

169. Morgan v. Loyacomo, 190 Miss. 656, 656-7 (Miss. 1941).

170. *See, e.g.*, United States v. Ortega, 27 F. Cas. 359, 360-61 (C.C.E.D Pa. 1825) (holding the seizing of the breast of a coat to be an assault); State v. Ortega, 827 P.2d 152, 154 (N.M. Ct. App. 1992) (holding the knocking or taking of a flashlight from the hand of the officer to be battery); Clark v. State, 746 So. 2d 1237, 1241 (Fla. Dist. Ct. App. 1999) (holding an intentional strike into the

(extending its status beyond its natural boundaries). Even in the presence of such a practice–which testifies unequivocally in favor of the recognition of functional bodiliness – it is also possible to encounter decisions that explicitly deny it. For example, in *Kurchner v. State Farm Fire & Casualty Co.,*[171] a man claimed that destroyed semen belonging to him was part of his body and the injury was bodily injury for purposes of obtaining insurance benefits.[172] However, the court held that semen outside the human body was property but not part of the body,[173] which was the reason for dismissing the plaintiff's claims.

IV. BODY REVOLUTION: ESTABLISHING A NEW THEORY OF BODILINESS

Having considered the existing doctrine and practice of the functional body theory, we cannot help but notice its extreme narrowness and inability to respond adequately to the full-scale technological changes that have caused the expansion of the human body's borders.[174] Taking into account that this theory has not set as its primary goal the expansion of the body beyond its natural limits, we are ready to propose a new theory of bodiliness, which is a more perfect, complete and consistent realization of principles of autonomy of will and bodily self-determination of the human being. Thus, it is believed that:

---

vehicle with driver sitting therein as battery against the driver); Reynolds v. Macfarlane, 322 P.3d 755, 759 (Utah Ct. App. 2014) (holding the grabbing of ten dollars from the hand of a person as battery); City of Fort Worth v. Deal, 552 S.W.3d 366, 373 (Tex. App. 2018) (holding intentional contact with a vehicle was actionable as a battery on its driver); United States v. Pruitt, No. 20-6121 (6th Cir. Jun. 14, 2021) at 18 (holding that the attempt to grab a gun way from an officer to be a battery).

171. Kurchner v. State Farm Fire & Casualty Co., 858 So. 2d 1220 (Fla. Dist. Ct. App. 2003).

172. *Id.* at 1221.

173. *See id.* ("sperm outside of the body is property and is not a part of the body.").

174. In a recent article, the author points out the future awaiting humans, which is that human bodies are gradually becoming connected to (and therefore dependent on) software, the Internet. For this situation the author suggests a rather colorful and aphoristic wording - the Internet of Bodies (IoB) - similar to the Internet of Things (IoT), *see* Andrea M. Matwyshyn, *The Internet of Bodies*, 61 WM. & MARY L. REV. 77, 86-87 (2019). The theory this article proposes, by extending the legal boundaries of the body, allows us to protect Internet devices and software-enabled storages which are remote directly from the body and which the body needs to perform its function, as a functional body.

(1) everything a person is born with, regardless of the unusualness and irregularity of it, is a human body by virtue of natural bodiliness;

(2) everything that has been firmly attached to a person by their will is their body by virtue of the attached bodiliness;

(3) anything that is not firmly attached to the human body, but either functionally replaces human's natural or attached body, or functionally supports that body to the extent that without that support the relevant part of the body would not perform its function or would perform it at a level that substantially reduces the quality of human life, or brings new bodily functions in addition to the body by virtue of natural and attached bodiliness, is the human body by virtue of functional bodiliness;

(4) anything that does not belong to natural, attached, or functional bodiliness, but has been reserved to perform the function of the body in the event of the inability to properly perform the function by what is a body by virtue of the body of these three bodilinesses, is a body by virtue of the reserve bodiliness;

(5) anything which was considered a body by virtue of natural, attached, functional, or reserve bodiliness, but which has lost a bodily feature apart from the will of person, if that feature can be restored, is a human body by virtue of reversible bodiliness.

Every bodiliness, as the basis for why something is recognized, treated, and protected as a human body, can best be understood by way of example. The expected and inevitable example of natural bodiliness is the body with which a person is born. This body, which a person is endowed with apart from their will, regardless of their desire, nevertheless, serves as the territory of the realization of their will, the basis for self-development and self-realization. Already at the moment of birth, it embodies the individual characteristics and uniqueness of the person, their value to society as a whole. Therefore, this body is protected in its entirety, no matter how abnormal it may appear in the light of the prevailing social or biological attitudes. What is natural is not abnormal.

In contrast to natural bodiliness, the basis for attached bodiliness is the will of human as the master of one's own body. Examples of this are prostheses and artificial organs that are inserted into the human body, performing a naturally necessary

and socially accepted function. As well as things that are attached to the human body, which do not necessarily have a biologically significant function, but which modify the body, such as piercings or aesthetic implants. In attached bodiliness, the reason for changing proprietary status of an object to bodily is the human decisiveness to make the object part of oneself, which culminates in the moment of direct attachment. With the help of the category of attached bodiliness it is possible to give proper meaning to the will of the individual, which absolutely dominates over its own nature embodied in the body, being entitled to change it in any way.[175] Since the attached bodiliness is recognized as equal to any other bodiliness, the decisions of the individual concerning their body protected by this bodiliness will bind society as a whole and the entire legal order,[176] characterizing the individual as sovereign of their body. Figuratively speaking, the emergence of an attached bodiliness reflects the transition of the legal view of the body from a constitution of the body to the *bodily Constitution* approved by the individual.

Additionally, functional bodiliness is essential in shaping the new legal status of the body. The most common example of functional bodiliness is the artificial ventilator.[177] This device, although not firmly attached to the human body, performs a respiratory function of the body that is crucial to the maintenance of life.[178] In such cases, the legal mechanism of functional bodiliness

175. When speaking of the right of a human to change their body, it is impossible not to quote the apt statement of an Italian author who observed that every human has a potential and an actual body. Stefano Rodotà, *Ipotesi sul Corpo "Giuridificato"*, RIV. CRIT. DIR. PRIV. 447, 447 (1994) (It.).

176. An example of how the attachment of a body part can affect the state and the law as a whole can be seen in a case considered by the ECtHR, which raised the issue of the artificial vagina of a transgender person being recognized by criminal law in Britain on an equal footing with the natural vagina for the purposes of the crime of rape. Christine Goodwin v. the United Kingdom, Eur. Ct. H.R., App. No. 28957/95, §§ 46, 78 (July 11, 2002). The theory of attached bodiliness that we have created can present a consistent dogmatic rationale for why transgender persons' decisions regarding their bodies should be protected, both in cases like the present one and in a host of other cases.

177. On the popularity of ventilators, *see* Arthur Slutsky, *History of Mechanical Ventilation. From Vesalius to Ventilator-induced Lung Injury*, 191 AM. J. OF RESPIRATORY AND CRITICAL CARE MED. 1106, 1107 (2015) (indicating that mechanical ventilation is "a very common modality" in intensive care units); David M. Polaner & George Gregory, *Respiration — how did we get here?*, 32 PEDIATRIC ANESTHESIA 97, 97 (2022) (pointing out that because of the polio epidemics, the earliest ventilators became widespread in 1940s-50s). *See also* Christine Ball & Rodney N. Westhorpe, *The Early History of Ventilation*, 40 ANESTHESIA AND INTENSIVE CARE 3, 4 (2012) (arguing that the first automated ventilators became popular at the beginning of the 20th century).

178. Artificial ventilators, similar in principle to today's ventilation systems, first appeared in the middle of the last century, and since then have saved many lives. For a detailed history of the emergence and development of ventilator

allow us to protect the interest in the normal functioning of the body, which, to compensate its internal natural weaknesses, acquires an external artificial "organ." However, the potential of functional bodiliness is much broader, and it can be applied not only to cases of replenishing lost or temporarily unused function of the body, but also to giving the human body a new bodily function not previously characteristic to the human body.[179] In particular, in the light of the scientific debate on the artificial womb,[180] the functional bodiliness may act as a propelling locomotive in the legal qualification of new gynecological inventions. Thus, artificial wombs, which were previously only a fictitious part of Huxley's[181] anti-utopia imaginary universe, or the fictional world of The Matrix,[182] have recently become the subject of intense scrutiny by tech industry giants.[183] It is noteworthy that the need to regulate

technology *see* ROBERT M. KACMAREK ET AL., EGAN'S FUNDAMENTALS OF RESPIRATORY CARE 1-14 (Elsevier eBook on VitalSource, 12th ed. 2021); Robert M. Kacmarek, *The Mechanical Ventilator: Past, Present, and Future*, 56 RESPIRATORY CARE 1170 (2011); Leslie A. Geddes, *The History of Artificial Respiration [Retrospectroscope]*, 26 ENG. MED. BIO. MAG. 38 (2007).

179. In bioethics there is an emerging field called human enhancement that explores the implications of improving the natural human body, *see* Alberto Giubilini & Sagar Sanyal, *Challenging Human Enhancement*, *in* THE ETHICS OF HUMAN ENHANCEMENT: UNDERSTANDING THE DEBATE 1, 1 (Steve Clarke et al. eds. 2016) (defining human enhancement as "any kind of genetic, biomedical, or pharmaceutical intervention aimed at improving human dispositions, capacities, and well-being, even when there is no pathology to be treated"); Bjørn Hofmann, *Limits to Human Enhancement: Nature, Disease, Therapy or Betterment?*, 18 BMC MED ETHICS 56, 56 (2017). *See also* PRESIDENT'S COUNCIL ON BIOETHICS, BEYOND THERAPY: BIOTECHNOLOGY AND THE PURSUIT OF HAPPINESS 13 (2003) (describing enhancement as "the directed use of biotechnical power to alter, by direct intervention, […] the 'normal' workings of the human body […], to augment or improve [its] native capacities and performances"); CHRISTOPHER COENEN ET AL., HUMAN ENHANCEMENT, 6 (2009) (conducting a study of human enhancement at the request of the European Parliament, clarify that the purposes of human enhancement is to "improve our natural abilities […] or to give us characteristics or abilities that no human being has ever possessed before").

180. *See, e.g.*, Emily A. Partridge et al., *An EXTrauterine Environment for Neonatal Development: EXTENDING Fetal Physiology Beyond the Womb*, 22 SEMINARS IN FETAL & NEONATAL MED. 404, 404 (2017) (considering the development of innovative reproductive methods and defining artificial womb as an extrauterine system recreating the intrauterine environment); Elizabeth Chloe Romanis, *Artificial Womb Technology and the Frontiers of Human Reproduction: Conceptual Differences and Potential Implications*, 44 J. MED. ETHICS 751, 753 (2018) (exploring the ethical and legal implications of new reproductive technologies and opining that the artificial womb technology replicates and replaces a biological process of gestation).

181. ALDOUS HUXLEY, BRAVE NEW WORLD 2 (2007).

182. THE MATRIX (Warner Bros. 1999).

183. See Margaret Davis, *Artificial Wombs Wanted: Elon Musk, Vitalik Buterin, Other Crypto Geeks Discuss Population Collapse and Ways of Easing Burden of Pregnancy*, THE SCIENCE TIMES (Jan. 21, 2022), www.sciencetimes.

this result of inventive labor is not far off, as the first prototypes of such mechanisms have already been created for the human foetus,[184] having previously been scientifically confirmed in experiments with animal embryos.[185] It is argued that an artificial womb will enable a child to be born from the zygote stage into a developed fetus, without using the natural womb.[186] Therefore, the frontline role of functional bodiliness is to legally justify why a male, not endowed by nature with the gift of child-bearing, becomes the holder of a new body part which is not inherent to them according to the laws of evolutionary development and the theory of human

---

com/articles/35710/20220121/artificial-wombs-wanted-billionaire-crypto-geeks-discuss-population-collapse-ways.htm [perma.cc/FDN8-DLBW] (recounting a discussion between Vitalik Buterin and Sahil Lavingia on the topic of the artificial womb, with Lavingia writing that investors should think of investing in technologies to make having kids faster, easier and cheaper such as synthetic wombs, and Buterin stating that synthetic wombs would remove a high burden of pregnancy from women).

184. *See* Jenny Kleeman, *'Parents Can Look at their Foetus in Real Time': Are Artificial Wombs the Future?*, THE GUARDIAN (JUNE 27, 2020), www.theguardian.com/lifeandstyle/2020/jun/27/parents-can-look-foetus-real-time-artificial-wombs-future [perma.cc/5HGY-UVNA] (reporting on the Philadelphia neonatologists' prototype of artificial womb for premature babies); Kayleen Devlin, *Film, The World's First Artificial Womb for Humans*, BBC NEWS (OCT. 16, 2019), www.bbc.com/news/av/health-50056405 [perma.cc/UV8M-2YWK] (describing the Dutch scientists progress in development of an artificial womb aimed at saving lives of premature babies).

185. *See* Jessica Hamzelou, *Artificial Womb Helps Premature Lamb Fetuses Grow for 4 Weeks*, NEW SCIENTIST (APR. 25, 2017) www.newscientist.com/article/2128851-artificial-womb-helps-premature-lamb-fetuses-grow-for-4-weeks/ [perma.cc/6U3P-VZ3E] (noting the scientific progress as to development of an artificial womb for premature lambs as equivalent to a human fetus at 24 weeks of gestation); Emily Partridge et al., *An Extra-Uterine System to Physiologically Support the Extreme Premature Lamb*, 8 NATURE COMMC'N 1, 2-4 (2017) (describing the exact model of artificial womb used for premature lambs). For the recent development in the field of animals, *see* Antonio Regalado, *A Mouse Embryo Has Been Grown in an Artificial Womb – Humans Could Be Next*, MIT TECH. REV. (March 17, 2021) www.technologyreview.com/2021/03/17/1020969/mouse-embryo-grown-in-a-jar-humans-next/ [perma.cc/6XCL-CN9C] (reporting that Israeli researchers have grown mice in an artificial womb for as long as 11 or 12 days, about half the animal's natural gestation period).

186. *See* Johanna Eichinger & Tobias Eichinger, *Procreation Machines: Ectogenesis as Reproductive Enhancement, Proper Medicine or a Step towards Posthumanism?*, 34 ETHICS OF ECTOGENESIS 385, 385 (2020) (outlining a hypothetical scenario of complete ectogenesis by means of an artificial womb); Elselijn Kingma & Suki Finn, *Neonatal Incubator or Artificial Womb? Distinguishing Ectogestation and Ectogenesis Using the Metaphysics of Pregnancy*, 34 ETHICS OF ECTOGENESIS 354, 355 (2020) (comparing a genuine artificial womb to the popular concept of growing "babies in bottles"); Carlo Bulletti et al., *The Artificial Womb*, 1221 ANNALS OF THE N.Y. ACAD. OF SCIENCES 124, 124 (2011) (depicting an artificial uterus as opening new perspectives for complete ectogenesis).

physiology.[187] In this context, the adoption of a theory of functional bodiliness would be in line with the modern trend towards gender equality, which has become a cornerstone of any democratic society.[188] Specifically, through this theory the male body will acquire the characteristics that were previously the distinctive features of the female body.[189] The dogma proposed in this paper will also echo the views of feminism. Well-known feminism theorist Shulamith Firestone's prophecies may come true: "[t]he reproduction of the species by one sex for the benefit of both would

187. Among mammals, which include humans, biologically male bodies lack the ability to be pregnant, *see, e.g.,* Kai N. Stölting & Anthony B. Wilson, *Male Pregnancy in Seahorses and Pipefish: Beyond the Mammalian Model*, 29 BIOESSAYS 884, 893 (comparing the reproductive systems of mammals and syngnathids and noting that the latter have acquired "an exceptional development [of male pregnancy]"); Adam G. Jones & John C. Avise, *Male Pregnancy*, 13 CURRENT BIOLOGY 791, 791 (2003) (averring that the "[m]ale pregnancy is an alien concept to us mammals"). In general, it is extremely seldom in nature that biologically male bodies are endowed with the ability to bear children. There are very rare exceptions, *see* Yan-Hong Zhang et al., *Comparative Genomics Reveal Shared Genomic Changes in Syngnathid Fishes and Signatures of Genetic Convergence with Placental Mammals*, 7 NAT'L SCI. REVIEW 964, 965 (2020) (presenting a case of male pregnancy in syngnathids, a family of fish which includes seahorses, pipefishes, and seadragons); Jamie Parker et al., *Characterization of Pipefish Immune Cell Populations Through Single-Cell Transcriptomics*, 13 FRONTIERS IN IMMUNOLOGY 1, 1 (2022) (characterizing representatives of the syngnathids as the most morphologically bizarre fishes, for their unique system of male pregnancy).

188. Leah Rodriguez, *US Vice President Kamala Harris Makes History With UN Gender Equality Speech, Global Citizen* (Mar. 17, 2021), www.globalcitizen.org/en/content/kamala-harris-csw-un-speech-gender-equality/ [perma.cc/NN67-XCHA] (discussing US Vice President Kamala Harris' UN gender equality speech); Susan Markham, *Women as Agents of Change: Having Voice in Society and Influencing Policy*, 5 WORLD DEV. REP. ON GENDER EQUAL. AND DEV. 1, 1-3 (2013) (considering the World Bank's policy regarding the promotion of gender equality); Ronald Inglehart et al., *Gender Equality and Democracy*, 1 COMPAR. SOCIO. 321, 321-24 (2002) (explaining the relationship between gender equality and democratization).

189. On the idea that an artificial womb would help achieve equality between men and women, *see* Brit J. Benjamin, *Ectogenesis: Is There a Constitutional Right to Substrate-Independent Wombs?*, 20 UNIV. OF MD. L. J. OF RACE, RELIGION, GENDER & CLASS 167, 171 (2020); Evie Kendal, *The Perfect Womb: Promoting Equality of (Fetal) Opportunity*, 14 BIOETHICAL INQUIRY 185, 185-94 (2017). *See also generally* Tuija Takala, *Human Before Sex? Ectogenesis as a Way to Equality*, *in* REPROGEN-ETHICS AND THE FUTURE OF GENDER 187-95 (Frida Simonstein ed., 2009); EVIE KENDAL, EQUAL OPPORTUNITY AND THE CASE FOR STATE SPONSORED ECTOGENESIS (2015); Anna Smajdor, *Defense of Ectogenesis*, 21 CAMB. Q. HEALTH. ETHICS 90 (2012). *Cf.* Guilia Cavaliere, *Gestation, Equality and Freedom: Ectogenesis as a Political Perspective*, 46 J. MED. ETHICS 76, 80-81 (2020) (pointing to the need for a careful approach to the artificial womb because access to the latter is limited, and this could cause further inequality between people who want a child); Elizabeth Romanis, *Partial Ectogenesis: Freedom, Equality, and Political Perspective*, 46 J. MED. ETHICS 89, 90 (2020).

be replaced by (or at least the option of) artificial reproduction: children would be born to both sexes equally."[190] In addition, many members of the LGBTQ+ community will finally have the cherished opportunity to have a child of their own without being bound to resort to surrogate mothers, whose services so far have been a constant reminder of biological traditionalism,[191] which by its anachronistic existence has limited the possibility of full cycle procreation to the need for both male and female participation.[192]

The trend towards overcoming biological injustices, by making corrections through the legal principle of equality, is not limited to equalizing male and female opportunities for access to the uterus. Another disadvantage of nature is the impossibility for a biologically female body to produce spermatozoa and for a biologically male body, respectively, eggs, with the result that only male gametes can be recognized as a genuine part of the man's body and female gametes as part of the woman's body. This can be viewed as pernicious errors of nature; therefore, this paper argues that the

190. SHULAMITH FIRESTONE, THE DIALECTIC OF SEX: THE CASE FOR FEMINIST REVOLUTION 12 (1970). *See also* Loren Cannon, *Firestonian Futures and Trans-Affirming Presents*, 31 HYPATIA 229, 236 (2016) (stressing that Firestone's view is becoming more of a reality considering recent technological changes); Sarah Franklin, *Revisiting Reprotech: Firestone and the Question of Technology*, in FURTHER ADVENTURES OF THE DIALECTIC OF SEX. BREAKING FEMINIST WAVES 29, 51 (Mandy Merck & Stella Sandford eds., 2010) (examining Firestone's cited thought and celebrating her contribution to the tradition of feminism). *Contra* SARAH BORDEN SHARKEY, AN ARISTOTELIAN FEMINISM 30 (2016) (suggesting that instead of eliminating biological differences, cultural conditions and institutional structures should rather be changed); Anna Watz, *Feminisms*, in THE YEAR'S WORK IN CRITICAL AND CULTURAL THEORY 201, 205 (2019) (recalling that the idea of dissociating reproduction from women's wombs is "now infamous"); Kathy Rudy, *Ethics, Reproduction, Utopia: Gender and Childbearing in Woman on the Edge of Time and The Left Hand of Darkness*, 9 NWSA J. 22, 30 (1997) (reporting that many feminists were against ectogenesis in general and Firestone's proposals in particular).

191. *See, e.g.*, Zairu Nisha, *Negotiating 'Surrogate Mothering' and Women's Freedom*, 14 ASIAN BIOETHICS REV., 1, 3 (2022) (asserting that "surrogacy of any kind […] contribute to the perpetuation of patriarchy"); JESSICA MEGARRY, THE LIMITATIONS OF SOCIAL MEDIA FEMINISM: NO SPACE OF OUR OWN 56 (2020) (highlighting that surrogacy does not help to combat patriarchal beliefs and rather reduces women to wombs).

192. *See* Claire Horn, *Wombs in Revolt*, AVIDLY (APR. 4, 2018), www.avidly.lareviewofbooks.org/2018/04/04/artificial-wombs-and-queer-family-forms/ [perma.cc/4H88-QBYL] (emphasizing the imminent change of status of historically endangered groups, such as women of color, queer and trans -men and -women, leading by invention and implementation of artificial wombs); Aarathi Prasad, *How Artificial Wombs Will Change our Ideas of Gender, Family and Equality*, THE GUARDIAN (MAY 1, 2017), www.theguardian.com/commentisfree/2017/may/01/artificial-womb-gender-family-equality-lamb [perma.cc/W65Y-ZP9N] (noting that artificial womb will erase the outdated inequality between men and women and will reduce prejudice to the same-sex couples).

proposed concept of the functional body, as a part of the new theory of bodiliness, will allow for overcoming the outdated flaws of evolution. The sharply growing market in both spermatozoa[193] and eggs[194] allows people with biologically male and female bodies to obtain what they did not previously have by nature – gametes of the opposite biological sex – and so it is a primary task of the law to establish proper regulation of the rights of the purchasers of these reproductive cells.

It is not uncommon to encounter the destructive view that reproductive cells cannot be owned by acquirers, and this retrograde position is disguised by the "special nature" of human gametes.[195] Proponents of such an odd theory state that reproductive cells allegedly may not be property just as human beings may not be deemed property.[196] One can also find opinions full of shallow

193. *See* Yong Tao et al., *Human Sperm Vitrification: The State of the Art*, 18 REPRODUCTIVE BIOLOGY AND ENDOCRINOLOGY 1, 2 (2020) (noting a high demand for sperm biobanking in artificial reproductive technology clinics). *See contra* Nellie Bowles, *The Sperm Kings Have a Problem: Too Much Demand*, N.Y. TIMES (JAN. 8, 2021), www.nytimes.com/2021/01/08/business/sperm-donors-facebook-groups.html [perma.cc/C8R8-M4KU] (highlighting the reduced supply of donor sperm in coronavirus pandemic and simultaneously increasing demand for this); Kayla Kibbe, *There's a Pandemic Sperm Shortage, and "Sperm King" Megadonors Are in High Demand*, INSIDE HOOK (JAN. 8, 2021), www.insidehook.com/daily_brief/news-opinion/pandemic-sperm-shortage-donors [perma.cc/64GF-39PN] (reporting the decreased supply of donor sperm arising in the period of pandemic).

194. *See* Emerich Kool et al*., Ethics of Oocyte Banking for Third-Party Assisted Reproduction: A Systematic Review*, 24 HUM. REPROD.UPDATE 615, 616 (2018) (describing a dramatic rise in the sphere of ova biobanking). *See contra* Pamela Tozzo, *Oocyte Biobanks: Old Assumptions and New Challenges*, 10 BIOTECH 4, 6 (2021) (mentioning the scarcity of supply in the field of ova donation); Francoise Shenfield, *Cross Border Reproductive Care in Six European Countries*, 25 HUM. REPROD.1361, 1363-64 (2010); Guido Pennings & Zeynep Gurtin, *The Legal and Ethical Regulation of Transnational Donation*, *in* REPRODUCTIVE DONATION: PRACTICE, POLICY AND BIOETHICS 130, 134 (Michael Richards et al. eds. 2012).

195. *See* EVA BRITTING, DIE POSTMORTALE INSEMINATION ALS PROBLEM DES ZIVILRECHTS 67 (1989) (trying to find a unique nature of reproductive cells in their ability to procreate human life).

196. *See, e.g.,* Arthur Kaufmann, *Der Entfesselte Prometheus: Fragen der Humangenetik und der Fortpflanzungstechnologien aus Rechtlicher Sicht*, *in* GENFORSCHUNG - FLUCH ODER SEGEN?, INTERDISZIPLINÄRE STELLUNGNAHMEN 259, 264 (Rainer Flöhl ed. 1985) (Ger.). *Cf.* RALF RÖGER, VERFASSUNGSRECHTLICHE PROBLEME MEDIZINISCHER EINFLUSSNAHME AUF DAS UNGEBORENE MENSCHLICHE LEBEN IM LICHTE DES TECHNISCHEN FORTSCHRITTS 272-3 (1999) (Ger.) (refusing to recognize the opportunity to acquire reproductive cells on the grounds that their commercialization would allegedly cause the commercialization of the product of those cells itself, i.e., the child); Christian Starck, *Die Künstliche Befruchtung beim Menschen - Zulässigkeit und Zivilrechtliche Folgen, 1. Teilgutachten: Verfassungsrechtliche Probleme, Gutachten A*, *in* VERHANDLUNGEN DES SECHSUNDFÜNFZIGSTEN DEUTSCHEN JURISTENTAGES, at A 17 (Ständige Deputation des Deutschen

traditionalism that openly disregard the rights of sexual minorities. For example, in the French case *Parpalaix v. CECOS*, the reproductive center's representative tried to prove that sperm could not be owned so as to not give them to the cohabitant of the deceased.[197] She stated that if ownership of reproductive cells was recognized, then transgender and queer couples could then acquire them for further procreation.[198] As can be understood, for her, the possibility of LGBTQ+ people to procreate is a negative consequence, as if these people belong to the Nietzschean category of "Untermenschen,"[199] whose reproduction must be prevented. The French court, however, rejected the arguments of a primitively binary nature, stressing that the natural necessity of procreation and the development of the family institution required that in such a situation the ownership of gametes shall be recognized.[200] The

---

Juristentages ed., 1986) (Ger.) (adopting the same view and arguing that the admission of the acquisition of reproductive cells is at odds with human dignity).

197. TGI Créteil, 1re ch. civ., Aug. 1, 1984, JCP 1984, II, 20321, note S. Corone.

198. *See* Sabine Maubouche, *Life After Death; French Woman Wins Sperm Bank Decision*, WASH. POST (AUG. 2, 1984), www.washingtonpost.com/archive/lifestyle/1984/08/02/life-after-death/54f2b01f-e280-467a-a402-4daa3325b6d3/ [perma.cc/WFE2-H9CP] (quoting the words of CECOS' representative); Elen Shapiro & Benedene Sonnenblick, *Widow and the Sperm: The Law of Post-Mortem Insemination*, 1 J.L. & HEALTH 229, 231 (1985-1987) (emphasizing that this outcome was presented as unfavorable and negative by CECOS' representative).

199. *See* FRIEDRICH NIETZSCHE, THE GAY SCIENCE 191-92 (Walter Kaufmann trans., 1974) (1887) (mentioning Übermenschen (overmen) and Untermenschen (undermen)). However, by calling the underman a Nietzschean term, it does not mean that it was coined by Nietzsche, but only that, philosophically, it can be fully comprehended in the context of Nietzsche's concept of the overman (apparently the antonym of the underman). The term became most infamous in Nazi Germany, where it was used to refer to those people who were considered inferior by Hitler's authorities. The label was used both in a racial context (against Jews, Slavs, and other peoples) and in a broader social context, against any group hated by the Nazis (including homosexuals). *See, e.g.,* OLIVER RATHKOLB, REVISITING THE NATIONAL SOCIALIST LEGACY: COMING TO TERMS WITH FORCED LABOR, EXPROPRIATION, COMPENSATION, AND RESTITUTION 84 (2002) (explaining how the Nazis justified their atrocities against the Slavs and Jews with the concept of underman); Ina R. Friedman, *The Other Victims of the Nazis*, www.socialstudies.org/sites/default/files/publications/se/5906/590606.html [perma.cc/8H97-Y9HB] (last visited June 1, 2022, 6:42 PM) (elucidating that the Nazis sought to exterminate homosexuals as "genetically defective" and applied the label of underman to their victims). It is noteworthy, however, that the Nazis borrowed this term not from Nietzsche's texts, but from a book by Lothrop Stoddard, a proponent of white supremacy and a member of the Ku Klux Klan. *See, e.g.,* Alfred Rosenberg, Der Mythus des 20. Jahrhunderts: Eine Wertung der seelischgeistigen Gestaltungskämpfe unserer Zeit 214 (1930) (calling the Russian Communists "undermen" and referring to the book written by Lothrop Stoddard, THE REVOLT AGAINST CIVILIZATION: THE MENACE OF THE UNDER-MAN (1922)).

200. TGI Créteil, *supra* note 197.

court thereby made a decision consistent with the will of the deceased, who wished to continue his lineage even after his own death.[201] A similar conclusion was reached by a Californian court in *Hecht v. Superior Court*, where the partner of a suicidal man was recognized as having ownership of his reproductive cells in a cryobank because he had bequeathed them to her.[202] Such judgments, in perspective, also provide an opportunity of creating a full family with a child for same-sex couples who, in the absence of the option of acquiring rights to other people's gametes (in particular eggs), have been significantly limited in their ability to create the family composition that they want.[203]

These decisions mark a step forward for humanity by recognizing the ownership of human gametes, but they are still rendered in a binary way, which deals with the relationship between a man and a woman of heterosexual orientation. In this light, two steps forward appear to be a Canadian decision in *JCM v. ANA*, in which a lesbian couple purchased sperm from donors, which both women used for their own fertilization, while depositing some of the sperm.[204] Subsequently, one of the women wanted to break up and leave for another partner and take the remaining sperm for her own fertilization, but the former partner demanded the sperm be destroyed.[205] In this case, the court decided that the sperm became property because the donors decided to sell it, and therefore, like any other property, the sperm was divided between

201. *Id*.

202. Hecht v. Superior Court, 16 Cal. App. 4th 836 (1993).

203. Nowadays, there are various options of procreation for same-sex couples, *see Reproductive Options for Gay Couples and Single Men*, CAL. CTR. FOR REPROD. HEALTH, www.center4reproduction.com/blog/reproductive-options-for-gay-couples-and-single-men [perma.cc/5WLJ-4RET] (last visited Feb. 20, 2022, 5:45 PM) (mentioning the opportunity for single men and men in same-sex marriages to have a child through donor eggs and surrogacy); *Fertility Treatment for Lesbian Couples/Same-Sex Female Couples*, CCRM FERTILITY, www.ccrmivf.com/lesbian-couple-family-building/ [perma.cc/U55Q-SGU2] (last visited Feb. 20, 2022, 5:50 PM) (noting that lesbian women can have children using donor sperm and intrauterine insemination, or use donor sperm and in vitro fertilization); *see also* Stephanie Watson, *Same-Sex Couples Face Fertility Issues When Trying to Conceive*, WEBMD (DEC. 16, 2020), www.webmd.com/infertility-and-reproduction/features/same-sex-couples-pregnancy [perma.cc/DA6C-R4S4] (reporting that most gay couples use donor eggs and gestational carrier); Marilynn Marchione, *Growing 'two-mom' approach to making babies lets gay couples share biological roles*, NBC NEWS (OCT. 16, 2013), www.nbcnews.com/healthmain/growing-two-mom-approach-making-babies-lets-gay-couples-share-8c11400197 [perma.cc/VV6A-5YAG] (describing a "two-mom approach" used by female same-sex couples when the egg of first mom is fertilized with donor sperm and then implanted into the uterus of the second mom).

204. JCM v. ANA, [2012] BCSC 584 (Can.).

205. *Id.* at 12.

the women.[206] Due to the odd number of sperm, the woman who desired fertilization received one more sperm, compensating for its property value.[207] So, the law allows us to protect the interests of individuals in the possession of gametes of the opposite sex, but we ask ourselves the question: does this protection ensure the complete abolition of the natural inequality? Hardly.

Under the earlier German Supreme Court decision,[208] the man from whom spermatozoa have been separated can claim the biomaterial as his functional body, but the woman has not been given such a right. As we can see, the male reproductive cells are recognized as her property, but not as her body, so inequality, although in a more subdued form, continues to parasitize this legal order.

Within the new theory of bodiliness, the perception of the functional body allows a woman to make male reproductive cells a part of her own body insofar as she needs them for procreation, i.e., for carrying out the natural function of any human body. It is within this paradigm that human beings can circumvent the natural impossibility of a body containing equally male and female. Here, we can get closer to the origins of Plato's myth of the origin of the human being, who at their inception contained characteristics of both sexes, therefore, were able to reproduce themselves (without the involvement of third parties).[209] In this way, functional bodiliness can provide equally protected procreative opportunities to everyone, regardless of their gender or marital status, contributing, by legal means, to the development of the principle of equality of the sexes.

It is also hard not to see what impressive potential many technological innovations would have if the broad definition of functional bodiliness this paper has presented was applied. This broad definition allows us to recognize, as a functional body, the organs and tissues that are new to a particular bodiliness, but which perform a function that is natural to humans as a species.[210] But

206. *Id.* at 96.

207. *Id.*

208. *See* BGH, 9, *supra* note 106 (explaining the theory of functional body).

209. *See* Kenneth James Dover, *Aristophanes' Speech in Plato's Symposium*, 86 THE J. OF HELLENIC STUD. 41, 41 (1966) (synopsizing Plato's myth that once upon a time, all human beings were double creatures, each with two heads, two bodies and eight limbs, and then, by the command of Zeus, each double creature was cut in half). *See also* Arlene Saxonhouse, *The Net of Hephaestus: Aristophanes' speech in Plato's Symposium*, 13 INTERPRETATION 15, 21-22 (1985) (asserting that Plato's myth tells of the perfection of the original people, who were whole and self-complete, not needing other people for their fullness). *See contra* Anthony Hooper, *The Greatest Hope of All: Aristophanes on Human Nature in Plato's Symposium*, 63 THE CLASSICAL Q. 567, 576 (2013) (analyzing Plato's myth and concluding that deficiency is the salient feature of our existence).

210. For instance, a man using an artificial womb performs a function that

functional bodiliness is not limited to this, and, on the contrary, it considers completely new bodily functions that can arise in human organs and tissues. Speaking of functional bodiliness in this direction, for clarity we can give the example of testing a certain drug by a person only on a part of their body, so that later, in case the drug passes the test, it can be introduced into the whole body. In this case, the respective part of the body discovers a new function necessary for maintaining the life and health of the body, which previously, due to underdevelopment of science and lack of understanding of all the possibilities of the body, could not be effectively activated.

Such an understanding of functional bodiliness can open the way for recognition of "organoids" as a functional body.[211] Organoids, modeling organs, and, therefore, performing their functions, are able to participate in the development of a specific therapy for a patient and in the selection of an effective drug that can cope with the disease.[212] There is no doubt that harm to specially grown from human cells organoids, taking into account their functional similarity to human organs, as well as their importance for conducting qualitative and effective therapy of the patient, must be qualified as harm to the functional body.[213] As long as the organoid has not been involved for realization of the body function, it will be considered as a human body by virtue of the reserve bodiliness. But, organoids are not the only development in human cell medicine that needs close attention from the legal side.

Another example of scientific progress in the constant and ongoing struggle against cancer is the so-called CAR T-cells.[214] The

---

is natural to humans as a species, for it is natural to the other biological sex of humans as a species, the female.

211. *See* Hans Clevers, *Modeling Development and Disease with Organoids*, 165 CELL 1586, 1586 (2016) (defining organoids as organ-like structures created from three-dimensional cell cultures grown from human cells); Mototsugi Eiraku & Yoshiki Sasai, *Self-formation of Layered Neural Structures in Three-dimensional Culture of ES Cells*, 22 CURRENT OP. IN NEUROBIOLOGY 768, 768 (2012); Michael Cantrell & Calvin Kuo, *Organoid Modeling for Cancer Precision Medicine*, 7 GENOME MED. 1, 1-3 (2015).

212. *See* Marc van de Wetering et al., *Prospective Derivation of a Living Organoid Biobank of Colorectal Cancer Patients*, 161 CELL 933 (2015) (proving that thanks to organoids it is possible to design individualized therapies for patients with cancer); Madeline Lancaster & Juergen Knoblich, *Organogenesis in a Dish: Modeling Development and Disease Using Organoid Technologies*, 345 SCIENCE 283, 283 (2014) (presenting the perspectives of modeling the course of the disease with the assistance of organoids); Aliya Fatehullah et al., *Organoids as an In Vitro Model of Human Development and Disease*, 18 NAT. CELL BIOL. 246, 246 (2016).

213. *See* Jochen Taupiz, *Organoide*, 2020 MEDR 805 (Ger.) (describing the prospects for the use of organoids in medicine and considering issues of qualification of their legal status).

214. *See* Kamilla Swiech et al., *Front Matter*, *in* CHIMERIC ANTIGEN RECEPTOR T CELLS: DEVELOPMENT AND PRODUCTION I, V (Kamilla Swiech et

infusion of CAR T-cells is a rapidly growing type of immunotherapy[215] for cancer often referred to as adoptive cell transfer.[216] This is based on modifying the protective cells of the human body by giving them the function of recognizing cancer cells.[217] At the present time, due to the imperfection of scientific advancement, most of these procedures are performed outside the human body.[218] Therefore, the correct qualification of the status of cells that can save human life from sometimes fatal diseases, before their reunification with the body of their source, is a matter of primary importance in the field of medical law. This paper argues that these cells, being outside the human body, can be regarded as a reserve body, since they retain a useful function that can be effectively deployed by reuniting these cells with the human body. It is with this understanding that the medically and physiologically important cells would have no lesser legal significance, thereby providing the utmost protection to human expectations against juridical neglect and reduction of the reserve parts of the human body to primitive regime of mere property.

Natural, attached, and functional bodilinesses are organically supplemented by the last two bodilinesses – reserve and reversible. The peculiarity of the first three bodies was that they had a physical (natural and attached bodilinesses) or functional (functional bodiliness) connection with the body, and therefore, are unable, in

al. eds., 2020) (defining CAR-T cells as T cells that are genetically modified with synthetic chimeric antigen receptor (CAR)); Anh Nguyen et al., *Emerging Novel Combined CAR-T Cell Therapies*, 14 CANCERS 1403, 1403 (2022) (stating that CAR T-cell therapy entails the engineered modification of autologous T cells to robust T cells that can initiate anti-tumor reactivity of the target tumor cells); Luisa Chocarro et al., *CAR-T Cells for the Treatment of Lung Cancer*, 12 LIFE 561, 562 (2022) (depicting CAR-T cells as T cells that are genetically engineered to specifically recognize and kill cancer cells through the expression of chimeric antigen receptors).

215. *CAR T-Cell therapy*, CANCER RSCH. UK (MAY 20, 2021), www.cancerresearchuk.org/about-cancer/cancer-in-general/treatment/immunotherapy/types/CAR-T-cell-therapy [perma.cc/GP8V-CUXC].

216. *See CAR T Cells: Engineering Patients' Immune Cells to Treat Their Cancers*, AM. NAT'L CANCER INSTITUTE (JULY 30, 2019), www.cancer.gov/about-cancer/treatment/research/car-t-cells [perma.cc/FSM8-MUE9] (characterizing CAR T-cells therapy as a type of adoptive cell transfer).

217. *See CAR T Cell Therapy: Using Immune Cells to Fight Cancer*, ANDERSON CANCER CTR., www.pennmedicine.org/cancer/navigating-cancer-care/treatment-types/immunotherapy/what-is-car-t-therapy [perma.cc/5U2W-9SQB] (last visited Mar. 3, 2022) (outlining the process of CAR T-cells therapy).

218. *Cf. Nanoparticles Create Effective CAR T Cells in Living Mice*, AM. NAT'L CANCER INST. (MAY 25, 2017), www.cancer.gov/news-events/cancer-currents-blog/2017/nanoparticles-engineer-immune-cells [perma.cc/2QNZ-X8VM] (reporting cases where nanotechnologies were used to modify cells without their removal from the body of mice); *see also* Tyrel Smith et al., *In Situ Programming of Leukaemia-Specific T-cells Using Synthetic DNA Nanocarriers*, 12 NATURE NANOTECHNOLOGY 813, 815-20 (2017) (describing the process of production of CAR T-cells with nanotechnologies inside the human body).

the absence of any of these connections, to protect human interests. The latter two, in turn, are autonomous from such connections with the body, and rely much more heavily on the individual's will, their decisions and expectations regarding their body. Thus, reserve bodiliness protects a person's interest in future organs and tissues of their body. Examples include: (1) frozen organs intended for future transplantation to a specific person, (2) frozen cord blood, (3) frozen eggs and spermatozoa which a person intends to use in the future to conceive a child, (4) and artificial devices intended to replace human organs or tissues (such as a reserve ventilation machine, a reserve prosthesis, an unused artificial womb). Reserve bodiliness guarantees effective legal means to protect a person's decisions about their future body. Through this, it encourages a person to take care of the life and health of their body in the future without worrying about the fact that law will continue to perceive the reserve body as an ordinary thing, diminishing its objective significance.

The latter, reversible bodiliness, demonstrates in the clearest and most tangible way that a person's control over their body has no boundaries, especially spatial boundaries. If a person has not expressed their will to separate their organs or tissues from their body, they will continue, in spite of their physical separation, legally to be a person's organs or tissues as long as they retain appropriate biological, chemical, and physical features. This would allow them to be assigned to any of the four described bodilinesses, and thus make them back the human body, regardless of whether they return to the body as the bodiliness that existed before their physical separation from the body, or as another bodiliness. A common example in medical practice where reversible bodiliness can be applied are severed limbs that can be reunited with the body. If a finger has been torn off a person, and the finger can be reunited with the body, it makes no sense to stop considering the finger to be a human body. To do so would be tantamount to allow, for example, that an ill-wisher of the victim in question could crush the finger and claim that they did not cause bodily harm, but only property damage (or would even argue that the finger is no longer a body, but has not become property and no harm has been done).

If, in contrast, external influences have made the parts of the body separated from the person irreversible (for example, if the part of the body separated apart from the person's will is completely burned), then, there is no reasonable ground to continue to extend to such separated parts the bodily legal regime (including those transformed into ashes). The separated parts will never again become useful to the person as their body. In this case, the separated parts of the body, regardless of the extent to which they have been processed, would be subject to the abstract ownership right of the person from whom they were separated, which we have

already discussed above.[219]

The flexibility of this paper's proposed rules of human bodiliness makes it difficult to incorporate them into the traditional systematics of the body, which is too rigid and does not allow, in many cases, for human interests to be considered. One of the main features of this paper's theory is that it takes into account that several persons may have legitimate interests in the same part of the body at once, and that the interests of each of them will be recognized by law as *bodily interests*. So, one and the same part may belong to two persons concurrently on the basis of bodily interests of the same kind, such as a ventilator serving several persons simultaneously[220] and being their functional body (this is particularly true in the light of shortage caused by COVID-19 pandemic).[221] Likewise, the same part can be the body of two different persons based on bodily interests of different kinds, such as an organ separated from one person apart from their will and attached to another person being an organ of the former by reason of reversible bodily interests, and an organ of the latter by reason of an attached bodily interest. In the cases described, there is a unique

219. *See supra* notes 71-72 and accompanying text.

220. Scientific evidence shows that such use of artificial ventilators is possible, *see* Jeremy Beitler et al., *Ventilator Sharing During an Acute Shortage Caused by the COVID-19 Pandemic*, 202 AM. J. RESPIRATORY & CRITICAL CARE MED. 600, 602-03 (2020); Tommaso Tonetti et al., *One Ventilator for Two Patients: Feasibility and Considerations of a Last Resort Solution in Case of Equipment Shortage*, 75 THORAX 517, 517-19 (2020); Richard Branson et al., *Use of a Single Ventilator to Support 4 Patients: Laboratory Evaluation of a Limited Concept*, 57 RESPIRATORY CARE 399, 400-01 (2012).

221. *See* Megan Ranney et al., *Critical Supply Shortages: The Need for Ventilators and Personal Protective Equipment During the COVID-19 Pandemic*, 382 NEW ENGLAND J. MED. e41 (2020) (concerning the shortage in America and worldwide); *Coronavirus. Pénurie de Respirateurs: Face à une Forte Demande, l'industrie s'organise*, OUEST FRANCE (Mar. 24, 2020), www.ouest-france.fr/sante/virus/coronavirus/coronavirus-penurie-de-respirateurs-face-une-forte-demande-l-industrie-s-organise-6790006 [perma.cc/DJG2-UFE2] (regarding the shortage in France); Héloïse Archambault, *Crainte d'une Pénurie de Ventilateurs Mécaniques*, LE JOURNAL DE MONTREAL (Mar. 13, 2020), www.journaldemontreal.com/2020/03/13/crainte-dune-penurie-de-ventilateurs-mecaniques [perma.cc/49Z8-8TND] (considering the shortage in Italy). *See also* Melissa Healy, *Ventilators for Coronavirus Patients are in Short Supply. How Scientists Might Pivot*, L.A. TIMES (APR. 7, 2020), www.latimes.com/science/story/2020-04-07/researchers-look-for-ways-to-divert-patients-from-ventilators-as-shortage-looms [perma.cc/UBB9-QXLG] (reporting the quantity of ill people suffering from coronavirus on America is 31 times higher than the number of existing artificial ventilators); Robert Truog et al., *The Toughest Triage - Allocating Ventilators in a Pandemic*, 382 NEW ENGLAND J. MED. 1973, 1973-5 (2020); *see* Minnesota Department of Health, *Allocation of Ventilators & Related Scarce Critical Care Resources During the COVID-19 Pandemic (May 4, 2020)*, www.health.state.mn.us/communities/ep/surge/crisis/ventilators.pdf [perma.cc/2M4E-RRMP] (setting out ethical criteria that should and should not guide decision-making regarding COVID).

legal phenomenon, the *multiplication of bodiliness*, which is peculiar to certain bodily parts by nature, such as the body parts of conjoined twins.[222] At the same time, in respect of the latter case of reversible and attached bodilinesses existing in parallel, it is necessary to note an important detail. In contrast to the rights to these organs as bodily parts, which will be equal for each person in any case due to the dignity and inviolability of the body of each of these people, the rights of abstract ownership in this common organ will be different. Since abstract ownership is independent of bodiliness,[223] if an organ taken apart from the will subsequently ends up in the body of another person, the abstract ownership of the person from whom the organ was taken will be preserved. The rights of the recipient of the organ will differ according to their good faith. If they are in bad faith, they will not have abstract ownership of the organ. But if they are in good faith, they will also have abstract ownership, which, however, will be weaker than that of the person from whom the organ was originally taken against their will, due to the rule of *prior tempore potior iure* [first in time, first in right].

In summarizing the discussion of the established theory of the functional body and the new theory of bodiliness, which is intended to replace the fatal flaws and critical weaknesses of previous theories, both recognizing and rejecting the functional body, it is impossible not to note that law, reflecting the established or desired social order, should not be burdened by norms of the past. These norms were unfounded even in their day and inspired by the primitivism of the thinking of lawyers who gave no special

222. In the literature on the legal status of the body of conjoined twins, unfortunately, the multiplication of bodiliness has never been addressed. Many scholars are convinced that twins have biologically (and thus legally) separate bodies, only joined together, *see* Kenyon Mason, *Conjoined Twins: Diagnostic Conundrum*, 5 EDINBURGH L. REV. 226, 229 (2001); Jenny McEvan, *Conjoined Twins: Murder or Mercy*, 33 BRACTON L.J. 7, 10 (2001); Lisa Hewitt, *A (Children): Conjoined Twins and Their Medical Treatment*, 3 J.L. & FAM. STUD. 207, 208, 218 (2001); Gisela Bockenheimer-Lucius, *Siamesische Zwillinge - Trennen oder Nicht?*, 12 ETHIK MED 223, 224 (2000) (Ger.); Hao-Hao Wu & Michael Wuschko, *Die Trennung Siamesischer Zwillinge*, 2016 RESCRIPTUM 110, 110 (Ger.). *But see* John Harris, *Human Beings, Persons and Conjoined Twins: An Ethical Analysis of the Judgment in Re A*, 9 MED. L. REV. 221, 226 (2001) (suggesting that twins have a single biological, and probably legal, body); Christine Overall, *Conjoined Twins, Embodied Personhood, and Surgical Separation*, FEMINIST ETHICS AND SOCIAL AND POLITICAL PHILOSOPHY: THEORIZING THE NON-IDEAL 78, 79 (Lisa Tessman ed., 2009); Mark Bratton & Susan Chetwynd, *One into Two Will Not Go: Conceptualizing Conjoined Twins*, 30 J. MED. ETHICS 279, 280 (2004); Kenneth Himma, *Thomson's Violinist and Conjoined Twins*, 8 CAMB. Q. HEALTH. ETHICS 428, 430 (1999). Seemingly, no one has concluded, which we justify, that conjoined twins, by nature, have a single biological and physical body, which, at the same time, is two separate legal bodies (multiplication of bodiliness).

223. *See* Shevelev & Shevelev, *supra* note 39.

importance to the human body and thought it right to regulate bodily issues by residual principle. Nowadays they appear as an extremely harmful anachronism, establishing an insurmountable obstacle to the bodily development of the individual. We are convinced that the concept of the human body is the cornerstone for the whole normative body, which is proudly called law. Only then will law be meaningful and powerful when it recognizes the meaningfulness and power of the body.

V. BODY REVOLUTION ALSO MEANS GENDER REVOLUTION: POSITIONING GENDER IN A BODILY DIMENSION

The new theory of bodiliness entails a radical revision of the concept of the human body that existed in the past. It allows equality to be reinforced and achieved in instances in which it previously seemed impossible. This paper has outlined many situations, in which a broad understanding of the body can ensure equality, but this list is not exhaustive. There is one rather unobvious implication of the new theory of bodiliness, which can be used to justify dogmatically and unimpeachably why a person's decisions about their gender should be binding on society at large. This implication of the theory we have developed is particularly salient and appealing in light of the fact that at present, despite numerous attempts, the legal status of a person's decisions about their gender has not yet been adequately defined.[224] Accordingly, from a legal perspective, it is not clear why these decisions should not be respected by the legal system as a courtesy required by the current trends of the new age, but should be honored by it as binding and restraining. Before articulating the essence of our proposed solution, this article will make a brief, but pithy interlude on how transgender rights are now protected. *En passant* [incidentally], this article will explain where the fatal weakness of the existing regulation lies.

A. Unequal Protection Clause: Destigmatizing Transgender People

The most likely way to protect the rights of transgender people is to invoke the Equal Protection Clause ("Clause"),[225] which has

224. *See, e.g.*, Karl Gerritse et al., *Decision-making Approaches in Transgender Healthcare: Conceptual Analysis and Ethical Implications*, 24 MED., HEALTH CARE, AND PHIL. 687, 689 (2021) (arguing that the gender-related decision-making is based on the negative obligation of others – not constraining a person while deciding on their gender).

225. U.S. CONST. amend. XIV, § 1 ("No State shall [...] deny to any person

been applied with enviable consistency by the courts.[226] The criterion for applying this Clause is the state's exercise of "intentional and arbitrary discrimination" against a specific class of people.[227] In other words, the Clause shields people from being subjected to "arbitrary or irrational" distinctions based on "a bare [...] desire to harm a politically unpopular group."[228] This Clause has indeed proven to be effective, since it has guided the courts in granting the claims of transgender persons.[229] However, the application of this Clause is questionable, as it is apparent from the above definition that it cannot by itself secure respect for a person's will and decision regarding their own gender, because it is applied irrespective of any decisions (including those regarding their own gender) by the discriminated person. If transgender people as a class are discriminated against, the protection of a particular transgender person from discrimination pursuant to this Clause merely states that they have decided their gender;[230] the Clause does not indicate that the law respects a transgender person's decision. Protection under the Equal Protection Clause is no act of respecting a transgender person's decision, but an act of condemnation of the state's arbitrariness.

Furthermore, the application of the Equal Protection Clause stigmatizes transgender persons and cements existing inequalities because it declares them a separate class, distinct from both men and women. This directly contradicts the wishes of transgender persons themselves. For example, if a person who was assigned the male sex at birth considers themselves a woman, this individual would obviously want the law to treat them as a woman, not as a

within its jurisdiction the equal protection of the laws.").

226. *See generally* Grimm v. Gloucester Cnty. Sch. Bd., 972 F.3d 586 (4th Cir. 2020) (concluding, under Title IX, discrimination against a person for being transgender or homosexual constitutes discrimination on the basis of sex); Adams v. Sch. Bd. of St. Johns Cnty., 968 F.3d 1286 (11th Cir. 2020) (finding Title IX prohibits discrimination on the basis of transgender status); Whitaker v. Kenosha Unified Sch. Dist. No. 1 Bd. of Educ., 858 F.3d 1034, 1034 (7th Cir. 2017) (holding that under Title IX and the Equal Protection Clause, a transgender high school student could not be barred from choosing to use the bathroom that corresponded with the student's gender identity).

227. Vill. of Willowbrook v. Olech, 528 U.S. 562, 564 (2000) (per curiam) (quoting Sioux City Bridge Co. v. Dakota Cty., 260 U.S. 441, 445 (1923)).

228. City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 446–47 (1985) (quoting U.S. Dep't of Agric. v. Moreno, 413 U.S. 528, 534 (1973)).

229. *See Grimm*, 972 F.3d (stating that transgender people can use the bathrooms that match their chosen gender); *Adams*, 968 F.3d; *Whitaker*, 858 F.3d.

230. This is if transgender people meet the criterion to belong to an arbitrarily discriminated class (e.g., arm length); discrimination against individuals with "long arms" could be deemed a criterion, instead of a decision about gender.

transgender woman.[231] However, the living law,[232] operating through judges, appears unable to provide respect for a person's decision about their gender, and primarily perceives them not as a person of the appropriate gender, but as transgender. Consequently, the application of the Equal Protection Clause paradoxically generates inequality, exposing transgender people to unequal treatment by the state.

Such a short-sighted approach is fraught with multiple problems for transgender persons. For example, substantial barriers are created for transgender women to participate in sports on teams that match their gender.[233] Courts, although favoring claims of transgender women, still subject them to a fairly onerous analysis as to whether they have an advantage over people who are deemed female based on the sex assigned at birth.[234] In essence, the

---

231. *See, e.g., Adams*, 968 F.3d at 1292 (quoting Mr. Adams, a transgender man, who described himself in the following way: "I am a boy [...], I'm just like every other boy."); *see also Frequently Asked Questions about Transgender People*, NAT'L CTR. FOR TRANSGENDER EQUAL., www.transequality.org/issues/resources/frequently-asked-questions-about-transgender-people [perma.cc/B326-3ZKL] (July 9, 2016) (pointing out that "[m]ost transgender people do have a gender identity that is either male or female, and they should be treated like any other man or woman"); Katie Alston, *The Transgender Arguments Dividing Society*, BBC, (Mar. 5, 2018) www.bbc.com/news/uk-43255878 [perma.cc/45D4-HNLS] (citing a transgender woman who stressed that she was "as valid a woman as any other woman"); *cf.* Ryan T. Anderson, *Transgender Ideology Is Riddled With Contradictions. Here Are the Big Ones*, THE HERITAGE FOUND., www.heritage.org/gender/commentary/transgender-ideology-riddled-contradictions-here-are-the-big-ones [perma.cc/WQ99-H2UE] (Feb. 9, 2018) (clarifying that "[a] transgender boy is a boy, not merely a girl who identifies as a boy").

232. EUGEN EHRLICH, FUNDAMENTAL PRINCIPLES OF SOCIOLOGY OF LAW 493 (Walter L. Moll Trans., Transaction Publishers 2001) (1936) ("The living law is the law which dominates life itself even though it has not been posited in legal propositions.").

233. *See* Gillian R. Brassil, *How Some States Are Moving to Restrict Transgender Women*, N.Y. TIMES, (Mar. 11, 2021) www.nytimes.com/2021/03/11/sports/transgender-athletes-bills.html [perma.cc/5B22-RNF6] (describing attempts to limit transgender women's participation in sports); Masha Gessen, *The Movement to Exclude Trans Girls from Sports*, THE NEW YORKER, (Mar. 27, 2021) www.newyorker.com/news/our-columnists/the-movement-to-exclude-trans-girls-from-sports [perma.cc/GR7U-MFHT]; Susan Gerb, *Discrimination Against Transgender Women in Sports*, WASH. POST, (Apr. 25, 2021) www.washingtonpost.com/opinions/letters-to-the-editor/discrimination-against-transgender-women-in-sports/2021/04/25/412a49d4-a20f-11eb-b314-2e993bd83e31_story.html [perma.cc/2L5E-2PHQ].

234. *See, e.g.*, Hecox v. Little, 479 F. Supp. 3d 930, 982 (D. Idaho 2020) (observing that "the significant dispute regarding whether [transgender] athletes actually have physiological advantages over cisgender women […] suggest[s] the Act" categorical exclusion of transgender women athletes has no relationship to ensuring equality and opportunities for female athletes"); B. P. J. v. W. Va State Bd. of Educ., Civil Action 2:21-cv-00316, 1 (S.D.W. Va. Jul. 21, 2021) (applying the standard of physical advantages, and finding that "B.P.J. [a

very fact that transgender women are confronted with other women regarding potential discrimination against the latter does genuinely and actually discriminate against the former. Surely, if transgender women were truly seen as women, then the courts would not even consider comparing some women to other women in terms of their natural abilities, including the notorious testosterone levels[235] that determine physiological advantage (just as it is still of no legal significance that some men's testosterone levels may be markedly and flagrantly higher than others). Accordingly, although in the cases cited earlier the courts have sided with transgender persons in applying this discriminatory analysis, nothing rules out the possibility that a different factual background could lead to a fundamentally different outcome.[236]

In the same odious vein of disparate treatment of transgender people is the Third Circuit's judgment in *Doe v. Boyertown Area School District*,[237] in which the court held that the school district's policy of permitting transgender students to use bathrooms and locker rooms that aligned with their gender was lawful. Although the decision turns out to be in favor of transgender people, the reasoning employed by the court to justify its decision is symptomatic. In explaining why the protesters' claims against the policy are not based in law, the court asserts that their "constitutional right to privacy is not absolute,"[238] and that this right must be "weighed against important competing governmental interests."[239] Namely, it should be balanced against "a compelling state interest in not discriminating against transgender students."[240]

As with transgender rights in the realm of sports, wisdom

---

transgender girl] has not undergone and will not undergo endogenous puberty, the process that most young boys undergo that creates the physical advantages").

235. *See, e.g.*, *Hecox*, 479 F. Supp.3d (addressing the "compelling evidence that equality in sports is not jeopardized by allowing transgender women who have suppressed their testosterone for one year to compete on women's teams").

236. At the present time, more and more American states have adopted bills of other anti-transgender regulations. *See* Jo Yurcaba, *'State of crisis': Advocates Warn of 'Unprecedented' Wave of Anti-LGBTQ Bills*, NBC NEWS (Apr. 25, 2021), www.nbcnews.com/feature/nbc-out/state-crisis-advocates-warn-unprecedented-wave-anti-lgbtq-bills-n1265132 [perma.cc/YGZ3-3YKU] (reporting that in 2021, eight bills targeting LGBTQ people have become law, most of them centered on transgender minors). *See also* Maria Caspani, *Factbox: New U.S. State Laws Directed At Transgender Youth,* REUTERS (May 25, 2022), www.reuters.com/world/us/onslaught-us-laws-targeting-transgender-youth-2022-04-07/ [perma.cc/ZLU8-2A93] (noting that transgender youths are attacked by laws on school sport bans, and healthcare restrictions, such as banning physicians from performing "irreversible gender reassignment surgery" on minors and others).

237. Doe v. Boyertown Area Sch. Dist., 897 F.3d 518 (3d Cir. 2018).

238. *Id*. at 528.

239. *Id*.

240. *Id*.

cannot help but ask – when a girl who is assigned the female sex from birth is prohibited from entering a girls' bathroom, will any court siding with her weigh the "non-absolute" rights of other girls against "compelling state interests" in not discriminating against this girl? This decision is peculiar not only because it presents the most vulgar inequality in the shadow of equality. It is also noteworthy because the court chose to balance the privacy rights of some individuals against the interests of the state and not the rights of other individuals (transgender people), even though normally courts should seek to balance precisely the interests of individuals.[241] This primitive approach to protecting the rights of transgender persons, in which it is not their decisions about their gender that are binding, but the state's decisions to protect transgender persons, only diminishes the rights of the latter.

Lastly, in *Adams v. School Board of St. Johns County*,[242] the Eleventh Circuit dramatically vacated[243] its past decision, which dealt with the Equal Protection Clause.[244] In this decision, the court found a sufficiently simple and evasive way to protect the rights of a transgender person. The court declared that the plaintiff was discriminated against, not vis-à-vis cisgender students, but in comparison to other transgender students in the school district.[245] The court declared that it "offer[s] no opinion on any claims relating to locker rooms, which [...] would entail a separate analysis of the means-ends fit in light of the particular interests at stake."[246] Although the court did not reproduce the analysis given in its vacated decision, by the very act of acknowledging that this analysis was necessary, the court again made it abundantly clear that the last thing it draws strength from for its judgment is an individual's

241. *See* NIKOLAY M. KORKUNOV, GENERAL THEORY OF LAW 52 (William G. Hastings trans. 1922) (pointing out that law is "the delimitation of the interests of different persons").

242. Adams v. Sch. Bd. of St. Johns Cnty, Fla, 3 F.4th 1299 (11th Cir. 2021).

243. The word "vacated" is too neutral and formal to capture how much the court has repudiated its past decision. In characterizing its past decision, the court declared that it "[is] no longer in existence" and that "[the majority] never wrote [it]." *Adams*, 3 F.4th at 1311. The fact that the majority relinquished its opinion was also referred to by the dissent. *See Id*. at 1321 (William Pryor, dissenting) (noting that "[t]he majority now tacitly concedes that its opinion could not withstand scrutiny ... [and it] accordingly has withdrawn its earlier opinion. . .").

244. *Adams*, 968 F.3d at 1295-304 (examining the matter and concluding that the transgender person's rights guaranteed by the Equal Protection Clause have been violated).

245. *Adams*, 3 F.4th at 1310-11 (indicating that a school practices discrimination if it allows transgender individuals (whose genders were changed on their documents *prior* to enrollment) to use bathrooms that match their chosen gender, but at the same time deny this right to transgender individuals whose gender was changed on their documents *after* enrollment).

246. *Id*. at 1313.

decision about their own gender.[247] If the court respected a person's decision about gender, and considered a transgender man to be as male, as those whose sex is male by birth, it would never conduct the infamous means-ends analysis in deciding to admit a transgender person to the bathroom facility at issue.[248] The court's new decision is a perfect illustration of how the mere mention of the need for special (compared to other people) interest analysis, when protecting the rights of transgender people, can corrupt an entire court decision and call into question the principle of equality.

B. Gender Is a Choice - How the Failure to Subjectivize Gender Drives Discrimination Against Gender-Fluid People

The prevalent paradigm of the way transgender people are viewed, in which they are severely discriminated against, is not exclusively and primarily due to a short-sighted classification of transgender people. The key premise leading to the inevitable discrimination is a misunderstanding of a person's gender, and a failure to realize and accept its subjective nature.

Courts often do not hide that they attach little, if any, importance to the understanding of gender as a person's decision. In *Grimm v. Gloucester County School Board*, the court addressed a fairly routine case regarding the prohibition of transgender persons from using sex-segregated bathroom facilities.[249] The court, rejecting the school board's argument that choice of gender identity did not cause biological changes in his body, observed that the school board's own bias was inherent in this argument, which was the belief that "gender identity is a choice."[250] In proffering its understanding of the world, without even bothering to provide any substantiation for its position, the court declared that there is a "medically confirmed [...] gender identity [of a transgender person],"[251] and therefore "being transgender is not a choice, it is as natural and immutable as being cisgender."[252] In effect, the court's decision *medicalizes* the idea of gender by refusing to view gender as a person's decision, since the court likely does not deem a person's decision about their gender to be a sufficient basis for rendering a judgment.

The court's inclination to interpret gender in medical terms is quite surprising, given that transgenderism as such is not a medical

247. *Id.*

248. *Id.* (implying that the court's analysis is an integral part of balancing the rights of transgender and non-transgender students).

249. *Grimm*, 972 F.3d.

250. *Id.* at 610.

251. *Id.*

252. *Id.* at 612-13.

condition, unlike gender dysphoria,[253] as the court itself admits,[254] and therefore the former does not need to be medically diagnosed or confirmed. Moreover, it is puzzling as to how a court will medically establish gender identity if the latter is the fruit of an individual's will and self-determination.[255] Medicine is incapable, at this stage of development, of getting inside a person's head. Its possibilities are limited to simply reproducing a person's words about their own gender, which, however, has little in common with confirmation, let alone medical confirmation.

Efforts to utilize medical evidence to detect transgender identity, coupled with a denial of the volitional nature of gender, can shed light on a theory that is implicitly and perhaps unconsciously exploited by the court. In the court's understanding,[256] gender clearly gravitates toward a biologically and permanently fixed sex, and transgenderism is merely a *rebutted morphological presumption* of sex, according to which sex (male or

253. *See* WORLD PROF'L ASS'N FOR TRANSGENDER HEALTH, STANDARDS OF CARE FOR THE HEALTH OF TRANSSEXUAL, TRANSGENDER, AND GENDER-NONCONFORMING PEOPLE (7th ed. 2021) [hereinafter WPATH, *Standards of Care*] ("Only some gender-nonconforming people experience gender dysphoria at some point in their lives."). *See also* Kevin Barry & Jennifer Levi, *Blatt v. Cabela's Retail, Inc., and a New Path for Transgender Rights*, 127 Yale L.J. F. 373, 386 (2017) ("Transgender identity is not a medical condition. Gender dysphoria, on the other hand, is a medical condition; it is real, serious, and physically incapacitating, and often can only be ameliorated by medical care."); Samantha Braver, *Circuit Court Dysphoria: The Status of Gender Confirmation Surgery Requests by Incarcerated Transgender Individuals*, 120 Colum. L. Rev. 2235, 2240 (2020) (referring to DSM-5 standards, stating that "it is dysphoria itself that is the problem - rather than one's identity").

It is worth noting that courts have a deep trust and respect for the WPATH Standards of Care, see Edmo v. Corizon, Inc., 935 F.3d 757, 769 (9th Cir. 2019) (stating, approvingly, that "the WPATH Standards of Care represent[ ] the consensus of the medical and mental health communities regarding the appropriate treatment for transgender and gender dysphoric individuals"); De'lonta v. Johnson, 708 F.3d 520, 522 (4th Cir. 2013) (finding the WPATH Standards of Care "generally accepted"); Norsworthy v. Beard, 87 F. Supp. 3d 1164, 1170 (N.D. Cal.), appeal dismissed & remanded, 802 F.3d 1090 (9th Cir. 2015) (explaining that the WPATH Standards of Care "[are] recognized as authoritative standards of care"); But see Gibson v. Collier, 920 F.3d 212, 221 (5th Cir. 2019) ("the WPATH Standards of Care reflect not consensus, but merely one side in a sharply contested medical debate.").

254. *Grimm*, 972 F.3d at 612 ("[a]lthough some transgender individuals experience gender dysphoria, and that could cause some level of impairment, not all transgender persons have gender dysphoria, and gender dysphoria is treatable.").

255. *See, e.g.*, Martha Minow, *Identities*, 3 YALE J. L. & HUMAN. 97, 98 (1991) (emphasizing that gender identity of a person depends upon that person's self-understanding); Jessica A. Clarke, *Against Immutability*, 125 YALE L. J. 2, 31 (2015) (noting that transgender identity might be considered crucial to an individual's right to self-definition).

256. *See Grimm*, 972 F.3d at 613 (rejecting gender's volitional nature and insisting on its immutability).

female), until proven otherwise, is determined on the basis of what genitalia one has at birth. In this context, it is fully understandable and even sensible for the court to resort to medicine, since otherwise it is unfeasible to determine a person's gender (by which the court means their true sex). Just as at birth sex is presumed on the basis of external traits, the complete and final determination of a person's sex can only be made by a medical specialist based on the totality of all circumstances present in the case. In other words, people are born transgender, being, by virtue of a biological anomaly, imprisoned in a body whose outward features do not reflect their natural sex.[257] Hence the court's statement that transgender identity is "natural and immutable."[258]

The theory described is extremely hazardous because it places central importance not on a person's decision about their gender, but on certain biological and medical criteria. Thereby, it opens the way for equating gender with sex and linking the validity of gender transition to a physiological and anatomical transformation of the body.[259] This will entail imposing on transgender persons expensive

257. *Cf. Transgender Youth and Access to Gendered Spaces in Education*, 127 HARV. L. REV. 1722, 1741 (2014) (arguing that transgender girls are "girls born with male bodies"); German Lopez, *Why Many Transgender People Feel They Have to Change Their Bodies*, VOX, (June 4, 2015) www.vox.com/2015/6/4/8728977/transgender-bodies [perma.cc/WYV6-G7CN] (stating that "[m]any trans people have felt […] that they were born in the wrong body"); *cf. also* Jisca Ristori et al., *Brain Sex Differences Related to Gender Identity Development: Genes or Hormones?*, 21 INT'L J. MOLECULAR SCI. 2123 (2020) (asserting the biological nature and premises of gender identity); Aruna Saraswat et al., *Evidence Supporting the Biologic Nature of Gender Identity*, 21 ENDOCRINE PRAC. 199 (2015).

258. *Grimm*, 972 F.3d at 612-3.

259. *See In re Sex Change of Childers-Gray*, No. 20170046, 51 (Utah 2021) ("[w]e believe that, much like a sex designation made at birth, a change in sex designation should be accompanied by objective evidence."); *Outlawing Trans Youth: State Legislatures and the Battle over Gender-Affirming Healthcare for Minors*, 134 HARV. L. REV. 2163, 2172 (2021) (highlighting that the courts have a more favorable attitude toward trans student's use of facilities consistent with their identified gender if they have provided evidence of undergoing gender-affirming medical treatment); Olga Tomchin, *Bodies and Bureaucracy: Legal Sex Classification and Marriage-Based Immigration for Trans People*, 101 CALIF. L. REV. 813, 842-43 (2013) (describing and criticizing the way many laws condition the validity of changing gender upon performing sex reassignment surgery, which the author denotes as "vague legal fiction"). Some authors do not consider a person to be truly transgender unless they have undergone sex reassignment surgery. *See, e.g.*, Katherine M. Franke, *Central Mistake of Sex Discrimination Law: The Disaggregation of Sex from Gender*, 144 U. PA. L. REV. 1, 33 n. 130 (1995) (suggesting that there is a "transgendered woman", who is a person who was categorized as physically male at birth, yet who regards herself as emotionally a woman and has undergone surgery to bring her body into conformity with her gendered identity. Also, claiming that there is a "pre-operative transgendered woman", by whom is meant a person who regards herself as a woman, yet has not undergone sexual transformative surgery).

and traumatic medical surgeries, which not all transgender persons are willing to undergo,[260] not to mention the financial ability to afford them.[261] In turn, this approach would result in the absolute exclusion of gender-fluid people from the legal plane, making it impossible to respect their decision about their gender.

In general, the courts, being affected by the pernicious influence of the aforesaid theory, have demonstrated their unwillingness to protect the rights of gender-fluid people. A telling example of this approach is Justice Alito's dissenting opinion in the landmark Supreme Court case, *Bostock v. Clayton County*.[262] In that case, Justice Alito, in criticizing the majority decision, pointed out that an impermissible corollary would flow from it, according to which "gender fluid [...] individuals [...] who have not undertaken any physical transitioning may claim the right to use the bathroom or locker room assigned to the sex with which the individual identifies at that particular time."[263] It is hard not to notice that Justice Alito refuses to recognize the force of a person's decision about their gender if it is not corroborated by a physical bodily change. But it is exactly the case for gender fluid people, who may perceive their gender differently at various times,[264] which a priori excludes their ability to change their bodies.

Although courts are reluctant to examine the right of gender-fluid people to visit all bathrooms, unless absolutely necessary in their decisions,[265] some courts do express their own views on this

260. *See* JAIME M. GRANT ET AL., INJUSTICE AT EVERY TURN: A REPORT OF THE NATIONAL TRANSGENDER DISCRIMINATION SURVEY 79 (2011) (reporting statistics on transgender people not wanting to undergo surgery [with a division by type of surgery]).

261. *See, e.g.*, SANDY JAMES ET AL., THE REPORT OF THE 2015 U.S. TRANSGENDER SURVEY 140 (2016) (reporting statistics according to which almost a third of transgender people live in poverty, and the unemployment rate among transgender people is 15%, three times higher than the average in America).

262. Bostock v. Clayton Cnty, 140 S. Ct. 1731 (2020).

263. *Id*. at 1779.

264. *See* Lisa M. Diamond, *Gender Fluidity and Nonbinary Gender Identities Among Children and Adolescents*, 14 CHILD. DEV. PERSPECT. 110, 110 (2020) (noting that gender-fluid people view their own gender as fluid over time); John Sumerau, *Foreclosing Fluidity at the Intersection of Gender and Sexual Normativities*, 43 SYMBOLIC INTERACTION 205, 206 (2020) (defining gender fluidity as the experience of one's own gender changing over the life course); Nat Thorne et al., *The Terminology of Identities Between, Outside and Beyond the Gender Binary – A Systematic Review*, 20 INT'L J. TRANSGENDERISM 138, 144 (2019) (defining gender-fluid people as individuals who experience their gender as changing over time); *cf*. Surya Monro, *Non-Binary and Genderqueer: An Overview of the Field*, 20 INT'L J. TRANSGENDERISM 126, 126 (2019) (defining a non-binary individual as including a person who can experience both male and female, at different times).

265. *See, e.g.*, Carcaño v. McCrory, 203 F. Supp. 3d 615, 654 n.40 (M.D.N.C. 2016) (underscoring that "[the issue of whether the individual transgender has]

issue in the obiter dictum, which, regrettably, have nothing in common with respect for the rights of these people. One of the mildest forms of neglect of the choice of gender-fluid people is found in *Adams v. School Board of St. Johns County*.[266] There the court dismissed the School Board's concern that allowing Mr. Adams, a transgender student, to use the boys' restroom could allow a non-transgender student to pose as a gender-fluid student to access the bathroom.[267] The judges specifically emphasized that the School Board offers no evidence that any students claiming to be gender-fluid have asked for access to all bathroom facilities, and therefore the court "remain[s] unpersuaded that this concern is anything more than hypothetical."[268] Strictly speaking, the court, in finding this concern to be "hypothetical," expressly suggested that it must be taken precisely as a concern, thereby displaying its prejudice.[269] The court, while ruling in favor of the transgender person, still distinguished between gender-fluid people and other transgender people, assuming that the former should not be protected to the same extent as the latter. The court thereby reveals that a person's decision and choice about their gender are irrelevant to it. If a person's decision about their gender mattered, it would be the same for both gender-fluid people and other transgender people, except that the latter may have sole decision, while the former may have a divergent decision every day. However, this is all without ceasing to be sincere and honest, which would reflect an actual understanding of themselves.

In *Whitaker v. Kenosha Unified School District,*[270] the Seventh Circuit, while downplaying the pivotal and cardinal importance of a person's decision about their gender, was even more candid than the court in *Adams*. The court stated that the School District's argument that a transgender person may not "unilaterally declare" his gender "misrepresents [transgender student's] claims and dismisses his transgender status," because the case at hand is not one in which a person "merely announced that he is a different gender."[271] In seeking to distinguish the circumstances of this case from the example set forth by the School District, which was vehemently opposed by the court, the court called attention to the fact that in this case the transgender individual "has a medically

---

an unqualified right to use all multiple occupancy bathrooms, showers, and changing rooms under all circumstances […] is not currently before the court").

266. Adams v. Sch. Bd. of St. Johns Cnty., 968 F.3d 1286, 1295 (11th Cir. 2020).

267. *Id*. at 1303.

268. *Id*.

269. *Id*.

270. Whitaker v. Kenosha Unified Sch. Dist. No. 1 Bd. of Educ., 858 F.3d 1034 (7th Cir. 2017).

271. *Id*. at 1050.

diagnosed and documented condition,"[272] and his decision to live "in accordance with his gender identity [...] was not without cost or pain."[273] Hardly did the court, which so industriously concentrated on the medical diagnosis and the hardships associated with a decision about one's gender, well understand that in a normal society where there is no discrimination against transgender persons and where decisions about one's gender are respected, such decisions should by definition not entail pain and suffering. They will not always be framed as a medical diagnosis, since the discomfort and stresses transgender persons experience are the product of their stigmatization in society.[274] On the contrary, in a normal and exemplary society, in which no crusades against transgender persons will be organized, the decision about gender will be "unilaterally declared" and "merely announced," and no one will require a person to undergo ordeals and suffering in order to vindicate respect for their decision.

Undoubtedly, the court decisions described above cannot be found to be deliberate and conscious attacks on transgender persons, in general, and gender-fluid persons, in particular. This is because the courts are guided by undeniably valid goals, such as protecting privacy, but the means are inadequate to the goals they seek to achieve. For example, in *Evancho v. Pine-Richland Sch. District*[275] the court granted a transgender person's request for access to a bathroom that conformed to their gender. At the same time, it sought to protect itself from reproaches that its decision would cause an outbreak of imposters who abuse their right to determine their gender and declare themselves transgender for nefarious and immoral purposes. For the sake of safeguarding society from such people, the court ruled that a "one-off, episodic declaration of transgender status [...] would not support a factual finding of transgender 'gender identity.'"[276] The court added that "[f]or an 'imposter' to take such steps [such as the person in the case did in order to be recognized as transgender] would be an extensive social and medical undertaking."[277] However, by imposing an

272. *Id*.

273. *Id*.

274. WPATH, *Standards of Care*, *supra* note 253, at 4 (writing that the stigmatization of transgender people causes psychological distress, anxiety and depression, as well as a unique minority stress). *See generally* Ilan Meyer, *Prejudice as Stress: Conceptual and Measurement Problems*, 93 AM. J. PUB. HEALTH 262, 262 (2003) (describing details of minority stress); Ilan Meyer, *Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence*, 129 PSYCH. BULL. 674 (2003).

275. Evancho v. Pine-Richland Sch. Dist., 237 F. Supp. 3d 267 (W.D. Pa. 2017).

276. *Id*. at 291.

277. *Id*.

obligation of social and especially medical transition, and by enjoining a person from understanding their gender differently at different points in their life, the court irreparably and unreasonably restricts the rights of transgender persons.[278] Its actions are like a blanket ban on the use of knives just because they may be used to kill. Rather than erecting high, and for gender-fluid people insurmountable, barriers, it would be far fairer to acknowledge a person's unconditional right to make decisions about their own gender, with the ability to demonstrate and punish wrongdoers who abuse that right.[279] In this way, there would be no necessity to assimilate gender in its immutability to sex, or to belittle the significance of a person's will regarding their gender.

C. Decisions about Gender as Acts of Bodily Self-Determination - Protecting Gender as Attached Bodiliness

As noted earlier, efforts made in practice to explain the nature of gender and to secure a person's decision about their own gender have been unsuccessful. None of the legal paradigms previously discussed could guarantee free decision-making about one's gender, which would be accepted by the courts and would bind the state and society in the same fashion that, for example, one's sex binds them. This woeful situation has a rather simple explanation – in the absence of a coherent dogmatic approach,[280] which is logical and broad enough to protect any decision on gender, the courts have

278. *Id.*

279. *See, e.g.*, *Doe ex rel. Doe v. Boyertown Area School District*, 132 HARV. L. REV. 2058, 2063 (2019) (detailing that "if a self-determination policy allows one student to violate another's privacy, the school district should punish the offending student rather than preemptively placing the burden on transgender students to show that they will not violate other students' privacy rights").

280. By and large, current approaches to gender are *ad hoc*, emerging to address specific problems, and they have not articulated a general answer as to what gender is in the legal sense. It is noteworthy that there have been some timid efforts in the literature to provide a dogmatic explanation of gender in a proprietary prism, through the concept of property, *see generally* Davina Cooper and Flora Renz, *If the State Decertified Gender, What Might Happen to Its Meaning and Value?*, 43 J. L. & SOCIETY 483 (2016); Sonia K. Katyal, *The Numerus Clausus of Sex*, 84 U. CHI. L. REV. 389 (2017) (hereinafter Katyal). *See also* Jessica A. Clarke, *Adverse Possession of Identity: Radical Theory, Conventional Practice*, 84 OREGON L. REV. 563, 644 (2005) (applying the doctrine of adverse possession to gender identity).

However, strictly speaking, these studies, despite their curious formulation of the problem, do not contribute to dogmatic clarity of the legal status of gender, as they merely draw analogies and leave open the basic question of the status of gender, *see, e.g.*, Katyal at 399-400 (warning that she would draw "analogies" between property and gender and suggesting a "metaphorical reconceptualization of gender regulation").

been forced to resort to other, narrower and more limited, but familiar approaches. The latter were oriented not toward a decision about gender, but toward something extraneous and alien to it, inevitably replacing the will and decisiveness of the individual with a set of external, purely contingent circumstances.

Answers to questions about the dogmatic essence of gender should be pursued, paradoxically, in the bodily dimension. The new theory of bodiliness, and the concept of attached bodiliness, can provide a clear and internally consistent explanation of what the nature of gender is and why the legal system must respect a person's decision about their gender. Thus, it is correct to protect these decisions as acts of bodily self-determination, and the change in gender itself as an artificial body part by virtue of attached bodiliness. This thesis is most readily applicable to cases of transgender persons undergoing sex reassignment therapy, since in such a case their decision to change their bodies would be externally implemented through appropriate medical procedures, and the body parts affected by these treatments would be deemed artificial. However, the decision to change one's gender, irrespective of one's willingness to undergo medical intervention, is in essence a real bodily change in the legal dimension. This is true because as long as law has not abandoned the paradigm of sex division, where the assignment of a person to a particular sex is material, a person and their body will always be viewed through a gender prism, in which the body of any person will be the body of a particular gender.[281] Therefore, the decision to change one's gender will directly change the legal characteristics of one's body, and in this sense the change in gender can be called an artificial body part. This article names it artificial, since it is not conditioned by birth, but by the decision of a person who is the master of their body and creator of their destiny, and part, since the human body, considered as a whole, is not exhausted by the gender, and thus gender is a legal part of the human body. Consequently, the legal order, and all its participants, would have to respect a person's decision about their own gender no less than they would have to acknowledge a prosthesis or implant inserted into a person's body – with all the legal consequences in the civil, criminal and other domains of law - as part of the human body.

Treating gender as part of the human body by virtue of an attached bodiliness is not only dogmatically sound, but also effective in practical terms, allowing for a hitherto unprecedented level of equality in the field of gender identity. Previously the courts linked the recognition of a person's decision about their gender to physical bodily transformations (both in the form of hormone therapy and surgery). But now, since gender is inextricably linked to the body,

281. *See, e.g.*, JUDITH BUTLER, GENDER TROUBLE 172-73 (1999) (arguing that our bodies are characterized by gender and calling them "gendered").

being its legal part, the very fact of changing gender will already be a change of body, and the meaning formerly attributed to sex reassignment surgery and similar procedures will ultimately belong to the pure and free decision to change gender.

Moreover, giving gender decisions the meaning of acts of bodily self-determination would, for the first time, destigmatize transgender persons in the eyes of the law, making it possible to protect gender decisions on the basis of an ideologically neutral concept of bodiliness. Concurrently, it will avoid the need to resort to the Equal Protection Clause analysis of transgender rights, which invariably creates a labelling and ostracization of transgender people. Ultimately, the new theory of bodiliness brings gender-fluid people out of the shadows, making it possible to justify why any person's decisions about their gender, regardless of their fluidity and periodicity, has exceptional legal value and cannot be trampled upon or disregarded.

A clear and unambiguous individual's legal status is the guaranteed and inalienable level of legal certainty that everyone deserves. Transgender persons do not want what the courts are now prepared to offer them – a shaky and amorphous legal status, determined case-by-case on the basis of the arbitrariness of individual judges.[282] By developing a clear, accessible, and non-contradictory explanation of the nature of a person's decisions about their gender, the new theory of bodiliness is a major step forward in providing legal certainty and predictability for transgender people that was previously available to all but them. Thus, the new theory of bodiliness can make its small but crucial and unique contribution to promoting equality, achieving diversity, and respecting individual choice.

VI. CONCLUSION

The conclusions reached by the authors of this article are discouraging for the predominant view of human rights in relation to one's own body and the parts separated from it. In the current paradigm, irrespective of which concept of regulation of rights to the

282. *See Doe*, 897 F.3d at 524 (endorsing and adopting a case-by-case analysis regarding transgender people's right to access bathrooms conforming to their gender); Adams v. Sch. Bd. of St. Johns Cnty., 318 F. Supp. 3d 1293, 1326 (M.D. Fla. 2018); A.H. v. Minersville Area Sch. Dist., 408 F. Supp. 3d 536, 572 n.18 (M.D. Pa. 2019); Carcaño v. McCrory, 203 F. Supp. 3d 615, 654 (M.D.N.C. 2016); N.H. v. Anoka-Hennepin Sch. Dist. No. 11, 950 N.W.2d 553, 572 (Minn. Ct. App. 2020). This practice of restricting basic rights of transgender people is a telling example of the general politics of eradication directed against the LGBTQ+ community, specifically, transgender individuals, *see* Nancy J. Knauer, *The Politics of Eradication and the Future of LGBT Rights*, 21 GEO. J. GENDER & L. 615, 620-22 (2020) (describing how exactly the politics of eradication affects transgender people).

body is chosen by researchers, the individual has an offensively small range of rights in relation to their own body. Additionally, they are forced to share these rights with third parties, society and the state, which, under current law, may also have protectable and legitimate interests in the individual`s body. Moreover, existing law, in determining what constitutes the human body, is guided by a myopic naturalistic view of the body, refusing to recognize the human will as the decisive factor constituting bodily status, and condemning the individual to bodily fatalism, an unjustified dependence on external influences in determining what should be considered the human body. We believe that law which deprives a person of the right to freely dispose of their own body and its detached parts in any manner whatsoever passes sentence on itself by its own restrictive laws, vividly demonstrating its inferiority and incapacity.

The only thing that gives the authors hope, despite the objectively bleak situation, is that it is possible to change the situation described. Moreover, existing theories and even judicial decisions have made the first steps, small and insufficient though they may be, that are courageous and worthy of respect and support, toward abandoning the false view that legitimizes the estrangement of the individual from their body. The emancipation of the human body is the condition without which social justice and a society in which self-determination and respect for everyone's opinion are practical principles, not empty and useless slogans, cannot be achieved. The new theory of bodiliness that we have developed, as well as the theory of abstract property rights of the human being in the body and its detached parts, allow for a fundamentally different level of self-determination and freedom in relation to one's own body, and thus constitute a body revolution that overthrows the former legal regime which jealously guarded its illegally appropriated privilege of exploiting the body of human against one's own will.