

# Challenging the Sex Binary in Hegel's Philosophy

*Yuka Okazaki*

*Kyoto University*

**ABSTRACT:** Although there is increasing investigation into Hegel's account of the sexes, the intricate relation of "intersex" to the concept of sexes remains overlooked or marginalized throughout Hegel's scholarship. This paper aims to examine Hegel's conceptions of sexual difference and "intersex" as found in his Jena 1805/06 draft and mature philosophy of nature. For this aim, first, I trace how Hegel incorporates (or fails to incorporate) intersex research by his contemporaries. Second, I explore how Hegel's view on sex difference changes from his Jena draft to the student's transcript of his Berlin lectures. Third and finally, I show how Hegel's critical analysis of classification and definition in his mature philosophy of nature and the *Science of Logic* intervenes in the "hermaphrodite" or "androgyny" discourses. In doing so, I will argue that Hegel challenges the stubborn and even still rampant belief in the strict sex binary, demonstrating the impossibility of drawing any given or ultimate borderline between the sexes.

**KEYWORDS:** sex binary, "intersex", philosophy of nature, classification, definition

## *1. Introduction<sup>1</sup>*

The late eighteenth and the early nineteenth centuries were marked by a reconceptualization of sexual differences. According to Thomas Laqueur, the scientific view prevalent up until around the 1750s conceived sexual differences as "a matter of degree, gradations of one basic male type".<sup>2</sup> This "one-sex" model viewed the female genitals the same as those of males but only situated inside the body; equating the uterus and ovaries with the scrotum and testicles, respectively, and considering the vagina as an interior penis. Galen, a Greek physician and surgeon and philosopher, propounded the theory that "the lesser heat of women kept the uterus inside and therefore provided a place of moderate temperature for gestation".<sup>3</sup> It was not until the late eighteenth century that the sexes began to be perceived as radically and completely different. This new understanding of the sexual differences is what he calls the "two-sex" model that differentiates between the entire experience of being a male and a female.

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<sup>2</sup> LAQUEUR, T. **Making Sex: Body and Gender from the Greeks to Freud**. Cambridge: Harvard University Press, 1990, p. 4.

<sup>3</sup> LAQUEUR. **Making Sex**. 1990, p. 29.



*Naturphilosophen* contributed vastly to this change the concept of sex difference underwent. Susanne Lettow argues that Hegel debated about the meaning of sexual difference and addressed its reconceptualization in terms of reproduction.<sup>4</sup> Hegel's noteworthy articulation on sex difference is found in his philosophy of nature. The *Zusatz* to §368 (§369 in the third edition) of his *Encyclopedia* defines the genitals of males and females as follows:

Just as in the male, the uterus is reduced to a mere gland, so, on the other, the male testicle remains enclosed in the ovary in the female, does not emerge into opposition, does not develop on its own account into active brain; and the clitoris is inactive feeling in general. In the male, on the other hand, we have instead active feeling, the swelling heart, the effusion of blood into the *corpora cavernosa* and the meshes of spongy tissue of the urethra; to this male effusion of blood correspond the female menses. In this way, the reception (*Empfangen*) by the uterus, as a simple retention, is, in the male, split into the productive brain and the external heart. Through this difference, therefore, the male is the active principle; and the female is receptive, because she remains in her undeveloped unity. (PN, p. 413)

Hegel argued that the female sexual organs remain situated in the abdomen and are not exposed as two outward parts, the penis (“swelling heart”) and the testicles (“active brains”). The male is perceived as active because he has a brain and heart between his legs, while because of her “undeveloped unity” the females merely function as retainers or containers.

Although Jessica Polish points out that there are few feminist criticisms of his *Philosophy of Nature*,<sup>5</sup> Hegel's account of sexual difference has been critically examined by feminist thinkers, beginning with Simone de Beauvoir's chapter “Biological Date” in *The Second Sex*.<sup>6</sup> For instance, Susanne Brauer contributes to a convincing refutation of Hegel's use of the “natural” sex difference for justification for normative gender roles and gender-specific division of labor.<sup>7</sup> Eva Bockenheimer's primary concern is to challenge Hegel's depictions of females or women as “indifferent” in his philosophical system.<sup>8</sup> There are also

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<sup>4</sup> LETTOW, S. Re-articulating Genealogy: Hegel on Kinship, Race and Reproduction. *Hegel Bulletin*, n. 42/2, 2019, p. 256-276. Lettow's central concern in her paper is to investigate Hegel's articulation of genealogical relations in terms of kinship, race, reproduction, and sexual difference.

<sup>5</sup> POLISH, J. *Sexual Difference and Development in Hegel's Encyclopedia in their Logical, Natural, and Spiritual Aspects* (doctoral dissertation). Nashville: Vanderbilt University, 2014, p. 50ff.

<sup>6</sup> de BEAUVOIR, S. *The Second Sex*, trans. Constance Borde and Sheila Malovany-Chevallier, New York: Alfred A. Knopf, 2010. On Beauvoir's reading of Hegel's philosophy of nature and her chapter “Biological Date”, from *The Second Sex*, see MUSSETT, S. M. Life and Sexual Difference in Hegel and Beauvoir. *Journal of Speculative Philosophy*. n. 31/3, 2017, p. 396-408.

<sup>7</sup> BRAUER, S. *Natur und Sittlichkeit. Die Familie in Hegels Rechtsphilosophie*. Freiburg/München: Karl Alber, 2007, p.127-129.

<sup>8</sup> BOCKENHEIMER, E. *Hegels Familien- und Geschlechtertheorie*. Hamburg: Felix Meiner, 2013, p. 205-212.

attempts to demonstrate how Hegel's account of sexual difference is outdated and not even the understanding of natural sciences of the time. For instance, Tine Chanter expresses worries that Hegel adheres to the one-sex model, which declined by the middle of the eighteenth century because Hegel's taxonomy of sex difference defines that "the sexual anatomy of the female is presented as the inversion of male sex organs".<sup>9</sup> Bockenheimer goes so far as to argue that Hegel's analogy between penis and heart and between testicles and brains derives from ancient theories.<sup>10</sup> Others provide a range of systematic interpretations of Hegel's conception of woman. For instance, Laura Werner argues that "[b]ehind both the female body and the position of women as belonging to only one domestic sphere of action lies for Hegel the undifferentiation of spirit"<sup>11</sup>. Alison Stone demonstrates that Hegel's exclusion of women from the public spheres reflects the hierarchical gendered opposition that structures his system of nature and mind: the opposition between concept and matter.<sup>12</sup> Stone also argues that in Hegel's philosophical system the principle of the family ("immediate unity") corresponds to the principle of the female body ("self/other indistinction")<sup>13</sup>.

However, almost nothing was ever said about the intricate relation of "hermaphrodites" to the sex binary in feminist criticism. How the sex binary requires and generates the "hermaphrodite" or "androgyny" discourses remains overlooked or marginalized throughout Hegel's scholarship. A notable exception is Heinz-Jürgen Voß's comprehensive study on the treatment of intersex in the medical, juridical, and philosophical history.<sup>14</sup> A large part of Voß's analysis of the early nineteenth century is devoted to a systematic examination of the invaluable contributions of Jacob Ackermann (1765-1815), a German anatomist and surgeon. It comprises his 1805 work on intersex infants,<sup>15</sup> his 1805 criticism of Gall's theory of Phrenology,<sup>16</sup> and his 1788 dissertation on differences between male and female anatomies. Voß also compares the

<sup>9</sup> CHANTER, T. *Ethic of Eros: Irigaray's Rewriting of the Philosophers*. New York: Routledge, 1995, p. 83.

<sup>10</sup> BOCKENHEIMER. *Hegels Familien- und Geschlechtertheorie*, p. 210.

<sup>11</sup> WERNER, L. "That Which is Different from Difference is Identity": Hegel on Gender. *Nordic Journal of Women's Studies*, vol.14/3, 2006, p. 183-194.

<sup>12</sup> STONE, A. *Nature, Ethics and Gender in German Romanticism and Idealism*, London/New York: Rowman and Littlefield, 2018, p. 192ff.

<sup>13</sup> STONE, A. Matter and Form: Hegel, Organicism, and the Difference between Women and Men. In: Kimberly Hutchings/Tuija Pikkinen (ed.) *Hegel's Philosophy and Feminist Thought: Beyond Antigone?*, New York: Palgrave Macmillan, 2010, p. 211-232.

<sup>14</sup> VOSS, H-J. *Making Sex Revisited. Dekonstruktion des Geschlechts aus biologisch-medizinischer Perspektive*. Bielefeld: transcript, 2010, p. 131ff.

<sup>15</sup> ACKERMANN, J. *Infantis androgyni historia et ichnographia accedunt de sexu et generatione disquisitiones physiologicae et tabulae V. aeri incisae*, Jena: Typis et sumptibus Maukianis, 1805.

<sup>16</sup> On the criticism of Gall's *Schädellehre* that Hegel provides in his *Phenomenology of Spirit*, see LAMBROS, K. *Hegels kritische Analyse der Schädellehre in der Phänomenologie des Geistes*. Würzburg: Königshausen u. Neumann, 1998.

texts by Ackermann and Hegel to draw similarities between their accounts of sexual organs, the issue that I will explore more in detail in the following section. Ackermann's intersex research, compared to his dissertation on the physical differences between the sexes, has been less studied even in the existing German literature on gender studies.<sup>17</sup> Similarly, Hegel's focus on the phenomenon of intersex has not been discussed, let alone mentioned by Hegel scholars, save for Bockenheimer's passing remark.<sup>18</sup>

However, the invaluable contribution Voß made to interpretations of Hegel's accounts of sex difference and intersex is limited to a critical investigation of the *Jenaer Systementwürfe* III (1805/06). However, the series of lectures on the philosophy of nature at Berlin University from 1819 to 1828 prove that Hegel gained a deeper insight into sexual difference from Ackermann's study of intersex infants, as I will try to show in this paper. In addition, Hegel's critical examination of the classification and definition of organisms still requires to be examined to show how Hegel intervenes in the pathologizing and stigmatizing labeling of "hermaphrodites" as "deformed", which had prevailed in his time.

This paper aims to explore how Hegel, in his *Jenaer Systementwürfe* and mature philosophy of nature, uses the figure of the "hermaphrodite" to develop his theory of sex difference. This paper proceeds along three trajectories. First, I situate Hegel's articulation in its historical context and constellation, by tracing what Hegel has incorporated (or failed to incorporate) from intersex research conducted by his contemporaries such as Jacob Ackermann, Lorenz Oken, Johann Friedrich Meckel, and Friedrich Tiedemann. Second, I explore how Hegel's view on sex difference changes from his Jena 1805/06 draft to the transcripts of his Berlin lectures on the philosophy of nature. In contrast to Stone's argument that "Hegel essentially retained the account of sexual difference that he first worked out in Jena",<sup>19</sup> I will argue that Hegel does reconceptualize sexual difference in his mature system of the philosophy of nature. Third and finally, I show how Hegel's critical analysis of the classification and definition in his mature philosophy of nature and the *Science of Logic* intervenes in discourses that pathologize and stigmatize the "hermaphrodite" as the deformed.

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<sup>17</sup> For example, see SCHIEBINGER, L. *The Mind Has No Sex? Women in the Origins of Modern Science*. Cambridge: Harvard University Press, 1989, p.180ff; HONEGGER, C. *Die Ordnung der Geschlechter. Die Wissenschaften vom Menschen und das Weib 1750-1850*. Frankfurt am Main, New York: Campus, 1991, p. 170-178.

<sup>18</sup> BOCKENHEIMER. *Hegels Familien*, p. 207.

<sup>19</sup> STONE, A. *Nature, Ethics and Gender*, p. 179.

## 2. *Sexual Difference and Intersex in the Jenaer Systementwürfe (1805/06)*

This section explores the accounts of sexual difference and “hermaphrodite” presented by Hegel in his lecture draft on the philosophy of nature scheduled on 1805/06 at the Jena University. Alison Stone argues that this draft shows Hegel’s assumption that females and males differently contribute to the “genus-process” [*Gattungsprozeß*] (GW 8, 303).<sup>20</sup> His primary concern in this assumption is to articulate the differences in sexual or reproductive organs of females and males. In this section, I demonstrate that it is not only ancient and outdated theories but rather the latest scientific knowledge that his articulations underlie. First, I begin this section by tracing how and why Hegel dismisses Galenian “one-sex” model. Second, I show how Hegel’s attempt to incorporate Ackermann’s intersex research has failed. Third, this section argues that there is Hegel’s affinity to Oken, Meckel, and Tiedemann, not Ackermann.

His account of genitals begins with the argument that “the same type underlies both the male and female genitals, only that in one or the other, one or the other part is essential: in the female, it is necessarily the undifferentiated [*das Indifferente*], in the male, the divided [*das Entzweite*], opposition” (GW 8, 172-173, in my translation). This argument is further developed to the question of which female genital corresponds to which male genital. He writes:

It has been the most difficult to discover the female uterus in the male genitals. The scrotum has ineptly been mistaken for it [the uterus Y.O.] simply because the testicles indicated a definitive correspondence to the female ovary. But rather it is the prostate in the male which corresponds to the female uterus. (GW 8, 173, in my translation)

In this passage, Hegel rejects the correspondence between the uterus and *scrotum* and proposes a new one between the uterus and *prostate*. Given that the Galenian “one-sex” model equated the uterus with the *scrotum*, the ovaries with testes, and the vagina with “an interior penis”; it is safe to say that what he is refuting here is nothing but the Galenian “one-sex” model.

Hegel utilizes Jacob Ackermann’s 1805 paper on intersex infants as proof of the correspondence between the uterus and prostate. Hegel writes, “it [the uterus Y.O.] is the prostate, in the male. Ackermann has convincingly demonstrated this in his hermaphrodite, which has a uterus, but otherwise in the male formation” (GW 8, 173). Ackermann had argued

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<sup>20</sup> STONE, A. Sexual Polarity in Schelling and Hegel. In: S. Lettow (Ed.), **Reproduction, Race, and Gender in Philosophy and the Early Life Science**, Albany: State University of New York, 2014, p. 267-268.

that the penis and clitoris, the prostate and uterus and the testis and ovary are analogous organs and that in a common primordium from which they derive, both female and male organs are latent.<sup>21</sup> Based on this, Hegel attempts to develop his argument against the notions prevalent until the middle of the eighteenth century.

However, a close and comparative reading of Hegel's and Ackermann's texts demonstrates how Hegel was not completely faithful to Ackermann. First, Hegel's discussion that "whereas the uterus is reduced to a mere gland in the male, the male testicle remains enclosed in the ovary in the female, fails to emerge into opposition" (GW 8, 173-174) demonstrates that he misses Ackermann's crucial point. Ackermann represents the prostate as "responsible for blood systems and surrounding the urethra in the male body".<sup>22</sup> For him, therefore, the prostate is not "a mere gland". Second, Hegel's infamous assessment of the clitoris as an "inactive feeling" and the penis as an "active feeling" (GW 8, 174) also reveals how Hegel fails to understand Ackermann's study. Brauer unpacks how Hegel's assessment is arbitrary, while Bockenheimer convincingly argues that Hegel has simply inferred this assessment derivatively from the reality where women were still denied an equal status with men in the modern society, not *vice-versa*.<sup>23</sup> However, this critique is insufficient. In his 1797 book that Hegel owned (GW 31/2, 1357), Ackermann recognizes that the clitoris is as active as the penis, arguing that "the sexual impulse acts on the blood vessels of the genitals, causing the male penis and the female clitoris to swell with blood, resulting in the erection of these parts".<sup>24</sup> Nevertheless, Hegel ignored Ackermann's recognition of the clitoris as active and assessed it as inactive in general. Thus, Hegel's assessment does not even accord with the biological description that Ackermann offered. Third and most importantly, Hegel misinterprets Ackermann's argument of why the prostate is "transformed into a uterus" in the female body or why the ovaries "remain in the lower abdomen" inside the female body.<sup>25</sup> Ackermann proposes that a web of abundant cellulose constitutive of the female body causes the uterus to remain inside the female.<sup>26</sup> By contrast, Hegel thought that the uterus's interior position signifies that the female remains in her undeveloped unity.

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<sup>21</sup> ACKERMANN. *Infantis androgyni historia et ichnographia*, p. 92; VOSS. *Making SEX Revisited*, p. 136.

<sup>22</sup> ACKERMANN. *Infantis androgyni historia et ichnographia*, p. 91.

<sup>23</sup> BRAUER. *Natur und Sittlichkeit*, p. 129; BOCKENHEIMER. *Hegels Familien- und Geschlechtertheorie*, p. 211ff.

<sup>24</sup> ACKERMANN, J. *Versuch einer physischen Darstellung der Lebenskräfte organisirter Körper mit einem Nachtrag versehene Ausgabe*. Jena: Friedrich Frommann, 1805 [1797], Bd.1, p. 180.

<sup>25</sup> ACKERMANN. *Infantis androgyni historia et ichnographia*, p. 91.

<sup>26</sup> ACKERMANN. *Infantis androgyni historia et ichnographia*, p. 91.

Here Hegel introduces the rhetoric of development to Ackermann's quantitative account of sex difference based on the extent of cellulose. This differentiates the Hegelian model from the Galenian "one-sex" model because the latter conceived sexual difference based on the degree of "vital heat", as mentioned above. This introduction leads Hegel to conclude that the normally developed organs of females are less developed sexually than the normally developed organs of males.

Hegel's conceptual introduction of development into the account of sexual difference tells us that "the single most significant development in the history of biological systematics in the modern era"<sup>27</sup> had ranged to sexual classification. As was the case for Kant, "the introduction of time" appeared in biological systems of classification in the late Enlightenment.<sup>28</sup> This sentiment can be also found in other contemporary writings, for example, in the work by Lorenz Oken (1779-1851), one of the most influential *Naturphilosophen* in the first decades of the nineteenth century.<sup>29</sup> In his book *Die Zeugung* (Generation) published in 1805, Oken equates the females with plants, and conceives the female sex as "an androgyny [*Zwitter*] fixed in the form of femininity".<sup>30</sup> According to Oken, pure femininity does not exist, and everything is related to the male. His desire to postulate the omnipotence of masculinity led him to deny the female any substantial role in sexual reproduction, by arguing that "as soon as they become pregnant, women become males completely. Only before they become pregnant, women are females".<sup>31</sup> Thus, what he formulates here is "a theory of reproduction that attributes all reproductive forces to the male principle".<sup>32</sup> In this respect, the contrast between Hegel's and Oken's views on reproduction is clear because, for Hegel, reproduction presupposes two sexes, whereas Oken considers the entire reproductive function to be the male principle.<sup>33</sup> Peter Hanns Reill identifies a nostalgia for pure masculinity underlying Oken's theory.<sup>34</sup> According to him, Oken yearned to return to the older, traditional account of females

<sup>27</sup> SLOAN, P R. Buffon, German Biology and the Historical Interpretation of Biological Species. **The British Journal for the History of Science**, vol.12, no.2, 1979, p.109ff.

<sup>28</sup> SLOAN. Buffon, p.109ff.

<sup>29</sup> VOSS. **Making Sex Revisited**, p.159ff.

<sup>30</sup> OKEN, L. **Die Zeugung**. Bamberg/Würzburg: Goebhardt, p.133.

<sup>31</sup> OKEN. **Die Zeugung**, p.134.

<sup>32</sup> LETTOW, S. Modes of naturalization: Race, sex and biology in Kant, Schelling and Hegel. **Philosophy and Social Criticism**, n. 39/2. 2013. p. 123.

<sup>33</sup> LETTOW, S. Generation, Genealogy and Time: The Concept of Reproduction from *Histoire naturelle* to *Naturphilosophie*. In: S. Lettow (Ed.), **Reproduction, Race, and Gender in Philosophy and the Early Life Science**, Albany: State University of New York, 2014, p 36.

<sup>34</sup> REILL, P. H. The Scientific Construction of Gender and Generation in the German Late Enlightenment and in German Romantic *Naturphilosophie*. In: S. Lettow (Ed.), **Reproduction, Race, and Gender in Philosophy and the Early Life Science**, Albany: State University of New York, 2014, p.73.

as inferior males, undergoing a turbulent time after the French Revolution, the Napoleonic Wars, and the defeat of Prussia.<sup>35</sup> However, there is a critical difference between Oken's account and the older ones. Like Hegel, Oken introduced a certain temporality into sexual classification. In doing so, he reconceptualized the difference between males and females in terms of gestation. His formulation conceives the "androgyny" as representing the gestation process through which gestating subjects transition from females to males.

The figure of the "hermaphrodite" also provided evidence based on which Johann Friedrich Meckel (1781-1833), a professor of anatomy at the University of Halle, generated his theory of sex difference. In his 1812 text devoted to the comparative analysis of abnormal embryological specimens, he stated that the male and female sexual organs develop from the same primordium and that their embryonic formations are different from each other only relatively, not absolutely.<sup>36</sup> In his 1816 text, he further outlined the idea that all human embryos begin life as female: "the Ur-form [*Urgestalt*] of sexual organs in the animals and embryos is the female".<sup>37</sup> Meckel relies on the "hermaphrodite", whose formation he assumes as a mixture of features generally considered the exclusive sexual property of males and females,<sup>38</sup> to justify his theory that identifies a common primordial structure of the sexes as a female. Thus, he characterizes the formation of the (feminized) hermaphrodite as the "standstill"<sup>39</sup> or "inhibition"<sup>40</sup> of the embryonic development process in which female genitals transition into male ones.

Similarly, Friedrich Tiedemann (1781-1861), a German anatomist and physiologist, in his 1813 text titled *Anatomie der kopflosen Missgeburten* (Anatomy of Anencephalic Monster), argues that "it cannot surprise us that they [deformed individuals Y.O.] are mostly of the female sex, partly because all embryos originally have only female genitalia, and partly because even the female genitalia express a standstill of the embryo on a lower development stage".<sup>41</sup> All

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<sup>35</sup> REILL, P. H. *Vitalizing Nature in the Enlightenment*, Berkeley/Los Angeles/London: University of California Press, 2005, p. 229.

<sup>36</sup> MECKEL, J. F. Über die Zwitterbildungen. In: *Archiv für die Physiologie* 11/3, 1812, p. 266; KLÖPPEL, U. *XX0XY ungelöst: Hermaphroditismus, Sex und Gender in der deutschen Medizin. Eine historische Studie zur Intersexualität*, Bielefeld: transcript, 2010, p.238.

<sup>37</sup> MECKEL, J. F. *Handbuch der pathologischen Anatomie* 2/1, Leipzig: Carl Heinrich Reclam, 1816, p. 200.

<sup>38</sup> MECKEL. Über die Zwitterbildungen, p. 267.

<sup>39</sup> MECKEL. Über die Zwitterbildungen, p. 292. KLÖPPEL. *XX0XY*, 2010, p.239.

<sup>40</sup> MECKEL. *Handbuch der pathologischen Anatomie*, p. 198. KLÖPPEL. *XX0XY*, p.239.

<sup>41</sup> TIEDEMANN, F. *Anatomie der kopflosen Missgeburten: nebst vier Kupfertafeln*. Landshut: Thomann, 1813, p. 84.



malformations, according to him, “express a standstill of the formation of the genitals at the various earlier stages which are normal to the embryo”.<sup>42</sup> Here he adds:

Evidence of the views that all embryos are primordially females, and that the male organ is merely a further formed female organ is the formation of genitalia in the so-called hermaphrodite or aphrodite, in the androgynes. (...) These genitals all represent the various stages between the female genitalia and the formed male genitalia, where a real gradual transition exists.<sup>43</sup>

Tiedemann's argument accords with Meckel's: both formulate the theory that characterizes the primordial structure of sexual organs as female; both employ the “hermaphrodite” or “androgyny,” whom both consider representing the transition from females to males, to prove their theory. When the issue of the embryonic primordial emerged in the first decade of the nineteenth century, the central disputes focused on the question of whether its sex should be considered neutral (indifferent) or feminine: Ackermann held the former view, whereas Meckel and Tiedemann preferred the latter.<sup>44</sup>

Let me return to Hegel. In his *Jenaer Systementwürfe*, he refers to Ackermann and postulates that the female has remained underdeveloped. Yet a close and comparative reading of their texts declares more striking similarities between Hegel's theory and that of Oken, Meckel, and Tiedemann. Hegel, contrary to his gesture of following Ackermann, shares with the former three the belief that females are, compared to males, less developed. They would have claimed, “one is not born, but rather becomes, a man”. In addition, they would not have neglected to add, “one is born a woman!”.

While existing interpretations stress Hegel's adherence to the “one-sex” model or the ancient theories of sexual difference, this section has traced how the accounts of females and “hermaphrodites” offered by Hegel in his *Jenaer Systementwürfe* resonate with the debates prevalent around 1800. What a young Hegel concludes from Ackermann's 1805 text is that the uterus corresponds to the *prostate*. Furthermore, he rearticulates what it means to be a female by introducing the concept of development into a Galenian understanding of females as heatless males. His re-articulation conceives the females as less developed in comparison to males, and requires the “hermaphrodites” to demonstrate the reorganization from females to males. Thus, this section shows how Hegel shares the view of females as less developed with his

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<sup>42</sup> TIEDEMANN. *Anatomie*, p. 84.

<sup>43</sup> TIEDEMANN. *Anatomie*, p. 85; KLÖPPEL. *XX0XY*, p. 245.

<sup>44</sup> KLÖPPEL. *XX0XY*, p.245.

contemporaries such as Oken, Meckel, and Tiedemann. This does not mean that Hegel has totally departed from the older thinking of sexual difference, but that Hegel's primary concern is to present his theory of sexual difference by using the most updated knowledge, not the ancient one. By exploring his *Encyclopedia Philosophy of Nature, Science of Logic*, and a series of transcripts on the philosophy of nature, the following sections will show how Hegel rearticulates what it means to be a female and "hermaphrodite". In doing so, I will argue that one cannot treat a young Hegel's account as presenting his consistent understanding of sexual difference.

### 3. *Sex Difference in Berlin Notes (1819-1828), and Encyclopedia, Logic*

#### 3. 1. *Rethinking Sex Difference and Intersex*

The accounts of sex difference and "hermaphrodites" that Hegel offers in the transcript of the 1819/20 lectures on the philosophy of nature made by Ringier are noteworthy. Hegel articulates here how undifferentiated embryological structures end up as male or female as follows:

Two sexes are primordially the same, even if they are posited as different in their formation. The masculine is more active, and the feminine is simply related to itself. The particular organs are also posited for this process [species-process, *Gattungsprozess*]. Human beings are primordially hermaphroditic and are formed from the same thing in different ways. In the lower animals, sex is entirely hermaphroditic. Therefore, what one can cognize from hermaphrodite is that the prostate becomes the uterus. scrotum-labia. (GW 24/1, 173, in my translation)

When Hegel argues that "[t]wo sexes are primordially the same, (...) human beings are primordially hermaphroditic", he sustains Ackermann's 1805 argument that in a common primordium from which the females and males organs, both female and male organs are latent.<sup>45</sup> Given Hegel's consistent argument that the primordial structure in the embryonic period is "asexual [*geschlechtslos*]" (GW 8, 301, GW 20, 370), he associates here the "asexual" with the "hermaphroditic". Hegel's association appeared in the historical context where "hermaphrodites" fell "under the rubric of teratology",<sup>46</sup> which considered them as sexually

<sup>45</sup> ACKERMANN. *Infantis androgyni historia et ichnographia*, p. 92; VOSS. *Making SEX Revisited*, p. 136.

<sup>46</sup> GERMON, J. *Gender: A Genealogy of an Idea*. New York: Palgrave Macmillan. 2009, p. 11.

undifferentiated, as without sexual function or impulse. For example, in his *Handbuch der pathologischen Anatomie* published in 1816, Meckel considered the androgynous formation [*Zwitterbildung*] pathological, a “fourth class of malformations”.<sup>47</sup> When Hegel insists that human beings begin with a hermaphroditic structure, he reiterates a negative connotation associated with “hermaphroditism” as “malformation”.

Subsequently, Hegel does withdraw his previous account that considered the female less developed than the male. From a feminist perspective, one might gain the impression that this signifies some improvement. However, it cannot be overlooked that his withdrawal of the sex hierarchy, a theoretical and perhaps political achievement, can be had only at the cost of the “hermaphrodites”. Hegel's Jena draft regarded the “hermaphrodites” to be proof that the uterus corresponds to the prostate (not the scrotum) and that the female was less developed than the male. This means that a young Hegel supposed the “hermaphrodites” to fall between the female (the underdeveloped male) and male categories. Put another way, Hegel declared in his Jena draft the belief that the females are even less developed than the “hermaphrodites”, let alone the males, in terms of sexual development. Yet the 1819/20 transcript highlights Hegel's belief that the “hermaphrodites” (rather than the females) represent an embryological origin, from which females and males develop in different ways. Hegel abandons his previous view that conceived the females as less developed than the “hermaphrodites” and males, and instead provides a new one in which both the females and males begin life as “hermaphrodites”.

In the 1828 transcript, Hegel mentions “men with breasts that secrete milk”<sup>48</sup> and tackles Ackerman's intersex research again to reveal the difficulty of identifying the sex of newborns.

Men with the breast that secrete milk. Hermaphrodites. Unification of female and male genitals. Ackermann[']s very instructive [study] about the hermaphrodite clearly demonstrates however different each part, each particular part, in the male and female genitals is, they behave such that parts of the male genitals are only imagined [*eingebildet*] in the female; for example, the female uterus becomes the prostate, and so on. Therefore, it is a type that underlies here. (GW 24/2, 1158, in my translation).

What does it mean when it is said that the male genital parts are “imagined” in the female? If Hegel, this time as in the Jena period, had been following Ackermann's argument

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<sup>47</sup> MECKEL. *Handbuch der pathologischen Anatomie*, p. 3; KLÖPPEL. *XXOXY*, p. 238.

<sup>48</sup> On the grounds of a man with milk-secreting breasts, von Schubert (1806) argues that “one sex has nothing prior to the other sex” (von SCHUBERT, G. H. *Ahnung einer allgemeinen Geschichte des Lebens*, n. 1, Leipzig: C. H. Reclam, 1806, p. 207). According to him, some male individuals can also menstruate.

that the abundance of celluloses transforms the prostate into the uterus in the female body, why wouldn't Hegel have argued that the prostate becomes the uterus in the female? What does Hegel attempt to account for by exemplifying that "the uterus becomes the prostate"? Is Hegel arguing that imagination can render the uterus to the prostate?

A more careful reading of Ackermann's study of infants with diverse sex development can provide further insights into this problem. Ackermann highlights morphological similarities between the genitals of the male and female newborns and the resulting confusion of gender identification. Ackermann notes that although embryonal sexual differentiation already occurs in the earliest stages of pregnancy, this sexual differentiation does not furnish "a distinct cognition of one sex or the other".<sup>49</sup> What Ackermann stresses here is, however, that even the morphological structures of the genitals of the newborns do not serve as a distinguishing mark of female or male.<sup>50</sup> These observations allowed Ackerman to illustrate how the length of the clitoris or the shortness of the penis in newborns can confuse the parents:

The unstable sexual characteristics derived from the extraordinary external genitalia are so ambiguous that in determining the sex of their children, parents themselves very often become confused even with speechless newborns themselves because a longer clitoris and a more enlarged labia minora extending to a labia majora would be disguised [*ementiantur*] as a boy, or conversely, a shorter penis and a more distended surface along the scrotal suture would pretend [*simulent*] to be a girl<sup>51</sup>.

This passage reflects the General State Laws for the Prussian States (*Allgemeines Landrecht für die Preußischen Staaten*), promulgated in 1794, requiring intersex newborns, called *Zwitter*, to be assigned either the female or male sex by the parents (§19).<sup>52</sup> Intersex infants or infants with diverse sex development might have complicated their parents' assignment of sex at birth based on the external genitals with which they were born. An early nineteenth-century textbook

<sup>49</sup> ACKERMANN. *Infantis androgyni historia*, p. 92, in my translation.

<sup>50</sup> ACKERMANN. *Infantis androgyni historia*, p. 92.

<sup>51</sup> ACKERMANN. *Infantis androgyni historia*, p. 92, in my translation.

<sup>52</sup> In chapter 1 of part 1 of ALP, the so-called "*Zwitter*" paragraph states: "the androgyny [*der Zwitter*] §19 When androgynous infants are born, their parents decide to which sex they are to be raised. §20 However, after the eighteenth year, such a person can freely choose to which sex he wants to belong. §21 According to this choice, their rights will be judged in the future. §22 However, when the rights of a third party are affected by an alleged androgynous persons' sex, the former may request an examination by experts. §23 The experts' opinions shall decide even against the choice of the androgynous persons and their parents" (in my translation). On this paragraph, see, for example, DUNCKER, A. *Gleichheit und Ungleichheit in der Ehe: Persönliche Stellung von Frau und Mann im Recht der ehelichen Lebensgemeinschaft 1700-1914*. Köln: Böhlau Verlag, 2003, p.278-279; LANG, C. *Intersexualität. Menschen zwischen den Geschlechtern*. Frankfurt: Campus, 2006, p.133.

on forensic medicine indicates that the clitoris is at birth “often larger than the penis, and has frequently given rise to mistakes”.<sup>53</sup> Insofar as a longer clitoris cannot be distinguishable from a shorter penis (that is, a clitoris can be indistinguishable from a penis), there might be an infant with a clitoris assigned male at birth or an infant with a penis assigned female at birth. There might be parents who expected their infant with a clitoris to be a boy, or parents who predicted their infant with a penis to be a girl.

Ackermann's view of “a shorter penis” and “a longer clitoris” is crucial for Hegel's 1828 discussion. When he argues that “the female uterus becomes the prostate” in case the male organs are “imagined” in the female body, Hegel accords with Ackermann, who points out the difficulties in sexual classifications based on similarities and differences in morphological characters of external genitals. Both Ackermann and Hegel argued that if the external genital with which a female newborn was born is “disguised”, “pretends” (the former view), or is “imagined” (the latter) to be a penis, then the newborn or its internal genital is assigned male at birth. Thus, Ackermann makes a significant contribution to Hegel's critical examination of gender assignment at birth based on the morphological resemblance of external genitals.

To sum up: for the account that Hegel offers in his mature philosophy of nature, the figure of the “hermaphrodite” has an ambivalent meaning. Hegel's re-articulation can be made only at the cost of the “hermaphrodite” insofar as it regards them as representing an embryological origin. However, the figure of the “hermaphrodite” helps prove Hegel's crucial point about the impossibility of the sex assignment. It enabled Hegel to develop his account in which females and males are of identical origins and develop differently. But at the same time, it led him to challenge the discernment of an infant's sex at birth based on morphological affinities.

However, Hegel's discussion still seems to have affinities with the pathologizing and stigmatizing discourse on “hermaphrodites” as “deformed”. The following section will show how Hegel offers critical insight into stigmatization, by examining how Hegel criticizes classification and definition in his *Encyclopedia* and *Science of Logic*.

### 3. 2. *Classification, Definition, and Ohnmacht der Natur*

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<sup>53</sup> LAQUEUR. *Making Sex*, p. 169.

Since Buffon's strident criticism of Linnaeus' taxonomy, there was a controversy over scientific classification and taxonomy. Hegel is concerned with and tackles this issue in his writings such as *The Phenomenology of Spirit*, *Science of Logic*, and *Encyclopedia Philosophy of Nature*.<sup>54</sup> Hegel also declares his opinion on the matter in his lectures on the philosophy of nature. For example, the 1821/22 transcript shows that Hegel stated that "we have to know that since the externality determines the nature, the contingency is at play variously in the natural world. Therefore, we must expect here no consistent systematization. What we call species or genus has then the side of the contingency" (GW 24/1, 464, in my translation). The 1823/24 transcript shows Hegel's dissenting opinion on classification based on "characters [*Merkmale*]" meaning morphologic traits<sup>55</sup>:

For classes, genera, etc., one seeks for characters [*Merkmale*] as essential, but characters are only essential for us to notice. They are not to be meant as if they were objective, essential determinations of the Genera. (...) [T]hey are neither the fundamental determinations nor universal determinations of genera. (GW 24/1, 489, in my translation)

In the *Encyclopedia* published in 1827 and 1830, Hegel stresses that there is "the difficulty and, in many cases, the impossibility of finding fixed distinctions for classes and orders from an empirical consideration of nature" (GW 19, 187; GW 20, 240-41).

Hegel identifies this difficulty or impossibility as the "impotence of nature [*Ohnmacht der Natur*]"'. The "impotence of nature" designates nature's inability "to adhere strictly to the notion in its realization" (PN, 24; GW 20, 240). Because of its weakness, "nature everywhere blurs the essential limits of species and genera by intermediate and defective forms, which continually furnish counterexamples to every fixed distinction" (PN, 24; GW 20, 241). Thomas Posch argues that the impotent of nature "reflects the fact that any – even the most sophisticated – system of classification of natural genera and species (...) is confronted with transitional phenomena, borderline cases, and exceptions".<sup>56</sup> The *Heidelberg Encyclopedia* published in 1817 mentions the impotence of nature in explaining the chemical reactions of metals (GW 13, 151). However, in the 1819/20 transcript, a creature between a plant and an animal is mentioned

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<sup>54</sup> KNAPPIK, F. Hegel's Essentialism, *European Journal of Philosophy* 24, 4, 2016, p. 763. LINDQUIST, D. On Origins and Species. *Hegel Bulletin*, n. 41/3, 2020, p. 439; GERHARD, M. *Hegel und die logische Frage*. Berlin: de Gruyter, 2015, p. 54ff.

<sup>55</sup> Similar criticism is found in the section "Definition" in the *Logic* (GW12, 213ff.).

<sup>56</sup> POSCH, T. Hegel and the Sciences. In: Houlgate, S.; Baur, M. (Eds.) *A Companion to Hegel*. West Sussex: Wiley-Blackwell, 2015, p. 182.

as the impotence of nature (GW 24/1, 142). In the 1821/22 transcript, the “intermediate thing [*Mittelding*]” between vertebrates and invertebrates (GW 24/1, 466, in my translation), and in the 1823/24 transcript, the intermediate animals between terrestrial and aquatic animals appear as the impotence of nature (GW 24/1, 746).

The 1828 transcript is noteworthy, for Hegel sheds light on the “transitional sex” [*Uebergangsgeschlecht*] as “a class that falls between the two classes” (GW 24/2, 975, in my translation). The ambiguity in the German *Geschlecht* or the change the term underwent in the late eighteenth century<sup>57</sup> complicates the exact understanding of this passage. Yet, given that Hegel seems generally to have used it as the term referring to “sex”, this passage suggests that Hegel’s critical insight into biological classification led him to reject the strict sex distinction. The 1828 transcript shows that Hegel thinks that there is or should be no given, immutable, or final criterion for drawing a borderline between males and females. Hegel insists that “one must recognize that these mixings are, and one does not need to include them into one fixed difference” (GW 24/2, 976).

Hegel’s concern with the impotence of nature further let him focus on the human “deformity”. The last section has argued that in the 1819/20 transcript, Hegel did not challenge the discriminatory, prevalent discourse that defines “hermaphrodite” or “androgyny” as “deformed”. However, the second 1827 and third 1830 editions of the *Encyclopedia* suggest that he is critical of it. Hegel writes that the natural objects “on the one hand, must be considered as belonging to the genus, while on the other hand, they lack certain essential determinations characteristic of the genus”. He adds:

In order to be able to consider such forms as defective, imperfect, and deformed, one must presuppose a fixed, invariable type. This type, however, cannot be furnished by experience, for it is experience which also presents these so-called monstrosities, deformities, intermediate products, etc. (PN, 24; GW 20, 241)

What matters to Hegel is that an observer can only consider an individual to be “defective, imperfect, and deformed” because the individual does only imperfectly correspond to a type, not because the individual *per se* is “defective, imperfect, and deformed” It is a type that entails the criterion for judging whether an individual is good or bad. To what degree it deviates from

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<sup>57</sup> Susanne Lettow argues that “In the German context, the term *Geschlecht* itself underwent a change. Until the late eighteenth century it did not designate first and foremost “sex” and “gender” but rather a larger kinship entity – a line of ancestors” (LETTOW. *Generation*, p. 38). See also SLOAN. *Buffon*, p. 125ff.

the type determines whether or not it is identified as “defective, imperfect, and deformed”. In biology, a type is a specimen of an organism to which anatomists attach the scientific name of that organism. However, in Hegel’s time, a type was to be a typical specimen of an organism that embodies defining features of the taxon of that organism. Therefore, an individual specimen only could serve as a type based on “a careful selection on the basis of a thorough acquaintance with the species it was intended to exemplify” and “the naturalist’s synthetic judgment of the distinguishing marks of the species”.<sup>58</sup> Given this context, it is safe to say that arguing that experience provides no type, Hegel disputes that one adopts any individual specimen as a type. For Hegel, every specimen that one can get through empirical observation is atypical, and therefore no specimen can be typical. By arguing that the evaluative judgment by comparing to a specimen is irrational, Hegel refutes labeling any individual as “defective, imperfect, and deformed”.

Finally, I examine Hegel’s *Science of Logic* (1816) because he is devoted to the conceptual consideration of beings considered “defective, imperfect, and deformed”, for example, beings considered to belong to human beings even though they are devoid of essential properties of human beings. Franz Knappik argues that the judgments of the concept include both a classifying aspect (ex: this is a human being) and an evaluating one (this is good or bad).<sup>59</sup> These two aspects are formulated as the two criteria: the minimal criteria (*Minimal Kriterien*) and the success criteria (*Erfolgskriterien*). According to Knappik, the minimal criteria determine “when an object can be counted as an instance of a concept, regardless of whether the object adequately or inadequately realizes the concept”.<sup>60</sup> The success criteria determine “in what cases the concept is adequately realized”.<sup>61</sup> Whether an individual object meets the success criteria determines whether one can judge it as a good example of the kind. When it does not meet the success criteria but meets merely the minimal criteria, one judges it as a bad example of the kind. When it does not meet any criteria, one cannot judge it as belonging to the kind. In the last case, it is irrational for that object to be judged as a bad example of the kind.

What does Hegel set as these two criteria in the section of definition? He discusses the objects that are judged as bad examples as follows:

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<sup>58</sup> DASTON, L. Type Specimens and Scientific Memory. *Critical Inquiry*, n. 31, 2004, p. 171.

<sup>59</sup> KNAPPIK, F. *Im Reich der Freiheit: Hegels Theorie autonomer Vernunft (Quellen und Studien zur Philosophie, 114)*. Berlin/Boston: de Gruyter, 2013, p. 248.

<sup>60</sup> KNAPPIK. *Im Reich der Freiheit*, p. 248.

<sup>61</sup> KNAPPIK. *Im Reich der Freiheit*, p.248.



Now the definition is supposed to indicate the determinateness of the concept in an immediate property; yet there is no property against which an instance could not be adduced where the whole *habitus* indeed allows the recognition of the concrete thing to be defined, yet the property taken for its character shows itself to be immature or stunted. In a bad plant, a bad animal of type, a contemptible human individual, a bad state, there are aspects of their concrete existence which are indeed defective or entirely missing but that might otherwise be picked out for the definition as the distinguishing mark and essential determinateness in the existence of any such concrete entity. A bad plant, a bad animal, etc., remains a plant, an animal just the same. If, therefore, the bad specimens are also to be covered by the definition, then the empirical groping in the dark for essential properties is ultimately frustrated, because of instances of malformation in which they are missing; for instance, in the case of the physical human being, the essentialness of the brain is missing in the instance of acephalous individuals. (SL, 712; GW 12, 214)

Here, the minimal criterion is whether “the whole *habitus* indeed allows the recognition of the concrete thing to be defined”. The success criterion is whether it does not lack essential properties. Hence, for example, it is rational that when one recognizes an individual as something completely different from a human being, it cannot be counted as an example of a human being (because it does not meet even the minimal criterion). Moreover, suppose one can recognize an object as a human being. In that case, even if it is devoid of essential properties of human beings, one can judge it as a bad example belonging to human beings (since it meets only the minimal criterion). Here, however, a question arises: what is the essential nature of human beings? This problem is worse than Rahel Jaeggi's point that it is impossible to “distinguish between essential and inessential features”.<sup>62</sup> As Hegel states, we cannot say that “the brain” is an essential part of being human since “acephalous individuals” (SL, 712; GW 12, 214) are human beings. Likewise, none of the properties that humans possess can be regarded as the essence of humans, insofar as there exist humans who lack that property. Therefore, Hegel is arguing here, as Mark Alznauer argues, “it is impossible to determine the definition of something from a single property that is exemplified by every instance of that thing”.<sup>63</sup> Conversely, as Myriam Gerhard rightly points out, if a definition is made possible as a definition, then “there can be no defective specimens, there are only specimens conforming to the definition and the rest of the objects excluded through the definition”.<sup>64</sup> When Hegel insists, however, that “a bad plant, a bad animal, etc., remains a plant, an animal”, he certainly

<sup>62</sup> JAEGLI, R. *Critique of Forms of Life*. Translated by Ciaran Cronin. Cambridge: Harvard University Press, 2018, p.120.

<sup>63</sup> ALZNAUER, M. Hegel's Theory of Normativity. *Journal of the American Philosophical Association*, 2016, p.203.

<sup>64</sup> GERHARD. *Hegel*, p.144.

does not foreclose “a bad plant or a bad animal” from the definition of the plant or the animal. Therefore, we can conclude from Hegel's discussion that the definition by essence is impossible.

#### 4. Conclusion

There prevailed in the early nineteenth century the pathologizing and stigmatizing views of “hermaphrodites” as “deformed”. Scientists determined “hermaphrodites” as missing human beings' essential characteristics. The last section has shown how Hegel challenges these views. Whereas in the philosophy of nature, Hegel sheds light on the irrationality of judging an object as “deformed” through comparison to individual specimens, in the *Science of Logic*, he refutes the judgment of an object based on the concept, arguing the impossibility of defining an object by its essence. Hegel's point is that any property that the human being has, whether the sexual impulse or the reproductive function, cannot be the essence of a human being as long as there is a human being who lacks it. In other words, by showing that one can define no object based on the essence, Hegel reveals that no judgment that an object is a “deformity” can be justifiable.

The previous sections have also shown how Hegel's discussion of sex difference transforms in his Jena draft and his mature system of the philosophy of nature. While his Jena draft conceives that the female remains in an earlier stage of sexual development than males, Hegel considers in his mature philosophy of nature that females and males are of the common embryonal primordium and develop in different ways. Hegel's latter articulation holds no difference in the degree of sexual development between females and males. However, it is problematic since it identifies embryonal primordium with “hermaphrodites”. Hegel considers “hermaphrodites”, instead of females, to be at an earlier stage of sexual development than females and males. In his criticism of empirical classification, however, along with amphibians and marine mammals, Hegel highlights the transitional sex as falling between the two sex classes of female and male. What Hegel aims to do here is to reject the stubborn and even still rampant belief in the sex binary and to prove the impossibility of drawing any given or ultimate borderline between the female and male.

*Yuka Okazaki*

*Kyoto University*

*Yoshidahonmachi, Sakyo Ward, Kyoto, 606-8501, Japan*

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