A new education of women.  
Denis Diderot’s anatomy course project for young noble women

Abstract. A new education of women. Denis Diderot’s anatomy course project for young noble women

Denis Diderot (1713–1784) explained how women’s education should be different than before. A woman should be considered a citizen, Diderot demanded placing primary social importance on her domestic activity. An interesting feature of this new approach to education of women was to include an anatomy course in their personal development. Denis Diderot did not devote a separate tractate to the issue of women’s education, nor did he write a concise curriculum in anatomy. However, the remarks scattered among various texts by the philosopher concerning that innovative concept allow us not only to reconstruct a fairly cohesive draft of an anatomy course for girls, but also superbly illustrate Diderot’s commitment to realization of his own ideas. Secondly, we need to consider the activities of one Ms. Biheron – the organizer of public anatomy courses – which exerted, as we will see, a huge influence on Diderot’s conviction of the need to incorporate such courses in women’s education. In the last part of the discourse, the involvement of the French philosopher in the educational reforms of Catherine II should be noted. The analysis of Diderot’s texts on education clearly indicates that the philosopher put a strong emphasis on changes in the methods of teaching women. As the director of St. Petersburg facility for girls he managed to partially put his project into effect. Of course, for French philosophers – blind to Russian realities – the unquestionable success of Diderot’s anatomy course might be another argument for the proclamation of the view that Catherine II realized in her country the postulates of the Enlightenment.

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„Women, how I pity you!”1 exclaimed Denis Diderot in his literary sketch Sur les femmes (On Women). The climax of this text resembles the later impressive rhetoric of

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the revolutionary work by priest Sieyès: here to the self-posed question, „What is a woman?”, the philosopher considered that disregarded by her parents, husband and children, she is „nothing in the society”\(^2\). The key to changing this situation was to be according to him education. In *Le Neveu de Rameau*. Diderot explains the extent to which women should educate themselves differently than thus far: nothing that touches upon philosophy or science (Diderot reserved these fields for men), little dancing, not too much singing or drawing, but much emphasis on grammar, history, geography, and especially morality. Such education, the philosopher believed, should strengthen in the adolescent girl her natural, feminine character, as well as instill civic spirit. A woman should be considered a citizen, Diderot demanded placing primary social rank on her domestic activity\(^3\). An interesting feature of this new approach to education of women was to include an anatomy course in their upbringing.

Denis Diderot did not devote a separate tractate to the issue of women’s education, nor did he write a concise curriculum in anatomy. However, remarks scattered among various texts by the philosopher concerning this innovative concept allow not only to reconstruct a fairly cohesive draft of an anatomy course for girls, but also superbly illustrate Diderot’s commitment to realizing his own ideas. The attempt to comprehensively show the issue encourages one to begin the analysis of the philosopher’s key texts on the subject of anatomy in general, that is the word „Anatomie” (Anatomy) in the *Encyclopedia*\(^4\) co-edited by him. Secondly we need to consider the activities of one Ms. Biheron, organizer of public anatomy courses, which had, as we will see, a huge influence on Diderot’s conviction of the need to incorporate these types in women’s education. In the last part of the discourse the involvement of the French philosopher in the educational reforms of Catherine the 2\(^{nd}\) should be noted. In fact in this field his project of anatomy courses for young noble women will, at least in part, be realized.

The author of the „Anatomy” article in the *Encyclopedia*, which, as we mentioned, was the Diderot himself, described the exploration of the intricacies of this science as the most beautiful ponder, a study worthy of a philosophers complete devotion. It seems that this human reflection on the construction of his own body has even found it’s illustration: regards to the second grid supplementing the article, which presented a draft of a skeleton by the Flemish anatomist Renaissance Era Andreas Vesalius. This is a ingenious metaphor that teaches the reader to approach the difficult issue with perspective and without prejudice. Such an experience is useful for in subsequent illustrations, the „gutting ones”, but also prepares for responsible consideration of the last panels showing human genitals.

\(^2\) Ibidem, p. 954.


The social and educational encyclopedic significance of „Anatomy”, which is of interest to us here, is clear. Diderot strongly emphasizes that familiarity with this field of knowledge seemingly reserved only for specialists, and in some respects even accursed by experts, should be common. Writing about the tasks and objectives of anatomy the philosopher stresses that everyone should know their body and know how to maintain health and even prolong life, and during illness be able to explain as accurately as possible the causes and symptoms of their ailments. He also mentions of adequate education, as well as the importance of modeling anatomical organs in wax or plaster and presenting them publicly. The summarizing, truly enlightened plea of this section of the article is „knowledge of anatomy is important for every human being”.

An interesting testimony to Diderot’s beliefs regarding education of girls are statements about the education of his own daughter Marie-Angélique. The content of the philosophers letter to the priest Diderot, similar in its expression to the opinions pronounced in other texts clearly shows how much the thinker believed that his daughter’s education was exemplary: „That which they teach in the convent she knows better than those who spent their entire youth there, perhaps even better than you, and her behavior is not at the same time so pretentious as theirs. It will soon be two months since she is married, and she has retained – indeed I hope that she will retain for the rest of her life – simplicity, meekness, temperance of a maiden. Modesty, moderation, do you understand?”5 If we wondered where, if not in the convent, the daughter of the philosopher could acquire these virtuous qualities, Diderot – suspecting doubt in his godfather – immediately explains. Thus three courses of anatomy from a certain Miss Biheron, whose wisdom and talents he praises later in the letter were sufficient.

Marie-Catherine Biheron (1719–1795)6, was a well known person in Paris, which she owed largely to the popularity she had enjoyed in the philosophy circles. Her activity was, as it seems, a dominant influence on Diderot’s belief in the possibility of realizing his postulates regarding education of women.

In 1761, in Paris, a pamphlet was published, today we might say a kind of an advertising folder, titled: Anatomie artificielle. Annonce de l’exposition publique de pièces d’anatomie artificielle, exécutées par la demoiselle Biheron (Artificial anatomy. Announcement of the public exhibition of pieces of artificial anatomy, performed by the lady Biheron)7. We learn from this book that „the body displayed is covered with natural skin that mimics its exterior and the overall layer and allows one to easily and safely move the entire specimen. Natural body parts were copied so precisely that they deceive the eyes of the audience […].The actual proportions of all parts, their relationship to one

another, colors, proper position, everything here is preserved to the extent that nature has
been copied with the utmost precision, with the credibility that will astonish”.

During the anatomy lessons, Miss Biheron showed on her models construction of the
head, especially the brain, eye and ear, then the lungs, heart, liver, bladder, including
intestine, muscles and finally the circulatory system, the so-called „artery skeletons” a fa-
mous representation of whose was at the time a drawing by Jacques Drake, copied, inter-
alia, as an illustration of the encyclopedic „Anatomy”.

Miss Biheron also had the opportunity to perform public displays in London. Before
she went there, Diderot already trained the British public In a letter to John Wilkes as-
sured him that she enjoys a great respect in Paris, and the anatomical models made by
her surprise with their precision9.

The brochure mentions that the course has won the recognition of the Royal Academy of
Sciences, Faculty of Medicine and the Royal Academy of Surgery. Demonstrations could be
viewed daily except for Sundays and public holidays from 11am to 1pm and from 4pm to
6pm, In the home Miss Biheron at Vieille Estrapade, corner of rue des Poules10.

A separate part of Miss Biheron course focused on sexual issues: showing private
parts of both sexes, however with an official caveat, the male gonads could be viewed
only by married women11. Such a lesson served as a model for Diderot as a model in his
project of an anatomy course for young Russian women. But before describing this idea
had by the philosopher, we must at least briefly explain why a Frenchman, had an impact
on how women in the country of the tsars were educated.

French thinkers, starting with Voltaire and Diderot praised in their writings the great
educational institutions founded by Catherine II at the beginning of her reign: Academy
of Arts, Cadet Corps, and educational institutions for girls from noble families in St.
Petersburg. Diderot saw in the Empresses educational reforms a confirmation of the
greatness and happiness prevailing in, already enlightened of course country.

The principles on which this education of noble girls was based were novelties, espe-
cially because the facility was supported by the coryphaei of the French Enlightenment.
Catherine II in fact casted a call for Russian philosophers to help her in the educational
reforms12. Diderot responded to the Empresses request by formulating many postulates in
his Mémoires pour Catherine II. Many of the ideas borrowed from Diderot’s texts are also
found in the less known today text, work of the Russian educational activist Ivan Ivanovich
Betskoy (1704–1795), entitled Plans et statuts des établissements de Catherine II13 (Plans

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9 See Diderot’s letter to John Wilkes from 19 October 1771, in Œuvres complètes, t. XI, p. 211.
10 Anatomie artificielle…, p. 3.
12 Catherine’s letter to Melchior Grimm from 10 March 1775, see P. Vermière, Introduction, in D. Diderot,
Œuvres complètes, t. XIV, p. 740.
13 I. Betskoy, Les plans et les statuts des différents établissements ordonnés par Sa Majesté Impériale
Catherine II pour l’éducation de la jeunesse, et l’utilité générale de son empire, t. I-II, Amsterdam 1775. See
G. Dulac, Diderot, éditeur des plans et statuts des établissements de Catherine II, „Dix-huitième siècle”,
and statuses of Catherine’s II institutions), the release of which the French philosopher managed after his return from Russia in 1774. Diderot also sent Catherine II an educational program entitled *Plan d’une université ou d’une éducation publique dans toutes les science* (Plan for a university or a public education in all sciences), a small work postulating for among other things the principle of obligatory secular education.\(^{14}\)

In 1764 in St. Petersburg, in the old Smolny convent exemplary school for young noble women was founded the headmistress of which became Sophie de Laffont. In 1773 Denis Diderot was named the curator of this so-called Institute.

In the Catherine’s II correspondence with Voltaire and Diderot, we find many testimonies of the French thinkers great enthusiasm for the idea of founding a house for young noble women in Smolny. „In one of your last letters, Catherine wrote to Voltaire, you wished me you […] the multiplication of pleasure. Let me now tell you about a certain kind of happiness which I am very interested and about which I would like to seek your advice"\(^{15}\), then tsarina describes the planned activities at the Smolny Institute. In another letter to Voltaire she presented the excellent results of education at a school for young noble women: „the girls […] admitted Catherine, went beyond all our expectations, making remarkable progress, and everyone recognizes that they have also become very polite, that they possessed the abilities useful to society, all this combined with a utmost decent upbringing, but without the austerity of morals proper to pupils of nuns”\(^{16}\). Philosophical Propaganda does not fail to proclaim this as evidence of Russian reforms. And such were Denis Diderot’s praises for the school in Smolny: „adequate measures were taken in your convent, he flattered Catherine II, to enhance health, preserve the nature of character, his innocence and cheerfulness, to develop talents without force, preparing for household work without degrading“\(^{17}\). In Diderot’s memoirs from his visits to Smolny there is a recurring astonishment due to relations that prevail between the tsarina and her proteges, the philosopher describes it as a tender intimacy. The Frenchman was taken to see Catherine surrounded by girls throwing themselves to hug her\(^{18}\). These evidence of an exceptional relationship allowed him to call Catherine „temporal and spiritual headmistress of Smolny residents”\(^{19}\).

Criticism of the traditional education of women contained in the Betskoy’s *Plans and charters* saw the main causes of poor education in the choice of teachers „Women who have renounced the world, or never got to know it, and are responsible for educating


\(^{15}\) Catherine’s letter to Voltaire from 10 February 1772, *Voltaire’s Correspondence*, T. Besterman (ed.), 16546.

\(^{16}\) Catherine’s letter to Voltaire from 14 April 1772, ibidem, 16644.

\(^{17}\) D. Diderot, *Mémoires…*, t. X, p. 613.


\(^{19}\) M. Tourneux, *Diderot et Catherine II*, p. 408. See Catherine’s letter to Voltaire from 11 October 1772, *Voltaire’s Correspondence*, 17012.
those who must live in it”\textsuperscript{20}. In one of her letters to Voltaire, Catherine II explained the fundamental difference between Smolny and the famous Versailles Saint-Cyr. divergence, which could provide even stronger support from Ferney: “we are far, she wrote on behalf of the policymakers of the Russian schools for girls, from the desire to make them into nuns, from starving them so that they can show off in the church, as it is practiced in Saint-Cyr\textsuperscript{21} (ultimately the tsarina deleted the sentence ending from the letter)\textsuperscript{22}. Principles that the founders put the Smolny school’s program were primarily attributable to the essential functions which education meets in society in general: “parental affection, conjugal love, devotion to children, the order of any society, inner peace in the family, health, restful sleep, permissible pleasures, shared happiness, all depend on the education of women no less than men”\textsuperscript{23}.

Petersburg school educational system appeared to Diderot as a large measure implementation of his own assumptions regarding women’s education. He enthusiastically wrote that the Institute created by Catherine forms “mother’s, wife’s and citizens, educated, honest and useful”\textsuperscript{24}. This met his general educational postulates. As was mentioned in the beginning, Diderot emphasized in his pedagogical texts civic education, teaching duties towards the State and society: “it comes down to giving to the sovereign zealous and faithful subjects; to the empire useful citizens; to the society educated people; honest and simply pleasant”\textsuperscript{25}. Educated, honest and useful...

Part of Diderot’s statements on education of girls at Smolny concerns what might be called a project for sexual education. The philosopher believed such a direction of study as necessary and helpful for the future role of wife and mother. Courses of anatomy, whose introduction to the pedagogical program for girls from Smolny Diderot proposed should, according to him be the basis of emotional initiation of women and lead to a general improvement of customs. We find here one of the more important principles of Diderot’s philosophy, namely, that sources of morality should be sought in nature.

The reasons for conducting courses of anatomy for young noble women seemed obvious to the philosopher. First of all, the idea was to prepare a women for motherhood: for pregnancy and childbirth, but also for conjugal intercourse. Anatomical knowledge was also to help women to better care for their own health. Other than that Diderot believed that a short course in anatomy for girls is the best, because it’s the least dangerous, way to cutting short their curiosity, cool down youthful imagination, and thus cleansing manners. This kind of sex education was to show girls the consequences of being intimate with a man, to warn them against dishonest courtship, and teach them self-restraint. It could also indirectly protect the St. Petersburg establishment against the danger of being closed as it in fact reduced the risk of any unaware resident being seduced.

\textsuperscript{20} I. Betskoy, \textit{Les plans...}, t. II, p. 113.
\textsuperscript{21} Catherine’s letter to Voltaire from 14 April 1772, \textit{Voltaire’s Correspondence}, 16644.
\textsuperscript{22} Ibidem, note b.
\textsuperscript{24} D. Diderot, \textit{Mémoires...}, p. 612.
\textsuperscript{25} D. Diderot, \textit{Plan d’une université...}, p. 431.
Having reached a certain age, every girl should be instructed as to intimate life, to be aware, as Diderot writes, „What it agreeable to hear and what is not, whether to continue a meeting or retreat, how to distinguish man with honest intentions from simpleton, a delicate work from a lewd author, book that is agreeable to read from that which is not proper, the cause of what is happening in her, the girl and what should be happening in her, a woman” 26. Anatomy lessons were therefore to reveal to young noble women Diderot’s „nature’s truth”, without of course causing in them disgust. These courses should not be given by men, for Diderot believed that „the habit of blushing in front of men should be kept, it is a puff, which adorns them, and could disappear” 27.

In his Memoirs to Catherine II Diderot once again gives as an example his daughter and the advantages of her such successful, sex education; „This is how she learned what is modesty, appropriateness, necessity of covering naked body parts before the eyes of men, she learned the reasons that lead persons of both sexes to immorality. This is how she learned the dangers and consequences of becoming intimate with a man. She can henceforth assess the value of coquetish words that are directed towards her” 28.

No less important objective of the course was to be relevant educating of future mothers. Diderot once again relied on the example of his daughter, exquisitely as judged prepared by Miss Biheron for the birth of a child. Thanks to anatomy lessons, during the first labor, Marie-Angélique Diderot, as attested by her father, showed steadfastness rarely encountered in unaware women 29.

The philosopher particularly calls attention to explaining to girls on the appropriate anatomical model of a baby in the womb, what is pregnancy and childbirth. A drawing portraying the connection of the fetus with the placenta by Gdansk scholar, physician and anatomist Jan Adam Kulmus (1689–1745) taken from the Encyclopaedia is a good illustration of such a lesson.

For it is worth mentioning that two of the panels, which complement the article „Anatomy”, Diderot ordered be copied from the Kulmus work entitled Tabulae anatomicae 30, and the encyclopedist also invoked the authority of the Gdansk native in the article „Hymen” (hymen) 31.

Diderot’s project to give the girls at Smolny „one, two or three courses of this strange, interesting and useful branch of knowledge” 32 has been realized. The philosopher proposed to organize the anatomy lessons in the last year of study prior to leaving the school

26 D. Diderot, Mémoires…, p. 615.
27 Ibidem, p. 616.
28 Ibidem, p. 613.
29 Ibidem.
31 Encyclopédie…, t. VIII, p. 392.
32 D. Diderot, Mémoires…, p. 615.
by noblewoman. In Betskoy’s work we find the information that a group of girls belonging to the fourth age, that is 15–18 years old, had a „short course in anatomy, which gives young ladies knowledge about their organs and cases to which they are exposed to pre-empt them instilling caution and giving the necessary warnings”.

Another idea related to Diderot’s anatomy courses for young ladies from Smolny, was not however realized. The philosopher in fact advised that Catherine II bring to St. Petersburg, already mentioned Miss Biheron, the specialist in the modeling of wax anatomical organs. It was her, his daughter’s teacher, that the philosopher wanted to see as an educator in Smolny. In his memoirs to Catherine II Diderot gave Grimm and d’Alembert who attended Miss Biheron anatomy courses, as witnesses to her integrity and sound knowledge. It was probably during his personal talks with the tsarina Diderot persuaded her to bring Miss Biheron to St. Petersburg.

After returning from Russia, the French philosopher submitted to Ivan Betskoy by letter an account of his talks with Miss Biheron who, „would be honored to be able add a modest contribution to improving the institutions of a monarch, who brings honor to her throne, and her sex”.

Through Diderot, Miss Biheron undertook teaching anatomy to the girls from Smolny and instructing other teachers, who at first would assist her, and eventually could replace her. In this letter, the philosopher again praised Miss Biheron writing that „she has a noble soul, a lot of tenderness, the purest morals, and at the same time is so enlightened that it rare to encounter even in a man; in a word has the ability to guarantee her Majesty’s contentment.”

Despite Diderot’s efforts, Catherine, ultimately did not bring Miss Biheron to Smolny, whereas she bought her anatomy set.

The analysis of Diderot’s texts on education clearly indicates that the philosopher put a strong emphasis on changes in the methods of teaching women. His design of an anatomy course for young noble women was based on experience upbringing his own daughter as well as reinforced by the success enjoyed by Miss Biheron presentations. As the director of St. Petersburg facility for girls he managed to partially put his project into effect. Of course, unquestionable success of this Diderot anatomy course only for the blind to the Russian reality French philosophers might be another argument for the proclamation of the view that Catherine realized in her country postulates of Enlightenment. Let us remember that twenty years after his return from Russia, Diderot still proclaimed that „this monarch in the institutions created by her, educates young people of both sexes in the spirit of liberty”. While for Russia he prophesied an idyllic future, as a state of „ordered liberty, from which will flow happiness of the nation, under simple rule of law.” Just a another case of the famous le mirage russe.

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33 I. Betskoy, Les plans..., t. II, p. 120.
34 Diderot’s letter to Betskoy from 15 June 1774, in D. Diderot, Œuvres complètes, t. XIV, p. 45.
35 Ibidem, p. 46.
37 Ibidem, p. 460.
38 See A. Lortholary, Le mirage russe en France au XVIIIe siècle, Paris 1951.