

ORIGINAL PAPER

Cultural history – the life and art of Constantin Brâncuși

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Abstract

On 19th February 1876 the Patriarch and Father of modern sculpture, the Titan from Hobita was born. The man who changed the history of world's sculpture was Constantin Brâncuși. Brâncuși was a Romanian sculptor who impressed everyone with his masterpieces. He became one of the most important, major artists who influenced the art of the twentieth century. His art is spread around the world either in private collections or in famous museums. His works are worth a fortune and some of them are involved in ambiguous situations in which institutions, states or wealthy people fight to gain the rights over them. Such situations have appeared with *The Kiss or Miss Pogany* - both of them have been in the middle of several controversies regarding their ownership. The sculptures of Brăncusi are so valuable because they represent the basis of modern sculpture and they define the style of the artist who has created through his art a way of seeing life in simple shapes that defy time. Constantin Brăncuși was an artist of his time – a man who hypnotized the world of art with his works as well as with his unique way of being. Brâncuşi was the sculptor who left an impressive number of works that have contributed to the transformation of world sculpture from traditional to modern. He placed his country - Romania - on the world's map of art giving it an important place and making it known as a fountain of inspiration for artists. This article is dedicated to the importance and significance of Constantin Brâncusi both as an artist as well as a personality who remained a major inspiration for each generation of artists.

Keywords: Constantin Brâncuşi; Romania; sculpture; major artist; art.

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My paper is dedicated to the impressive art and personality of the Romanian sculptor Constantin Brâncuşi. I choose Brâncuşi because he has truly had an impact in the world's cultural history. He was considered the greatest Modernist sculptor because he "saw reality in terms of a few basic, universal shapes: the egg, the smooth pebble, and the blade of grass. Whatever the subject, from 1910 he simplified its form – in wood, marble or metal – into these elemental shapes." (Strickland, Boswell. 2007:133)

Coming from a simple and modest family, Brâncuşi has succeeded in becoming the Titan of Sculpture, the Prince, the Visionary of art through his huge collection of sculptures made of stone, wood, bronze, metal or gypsum. Brâncuşi is one of the greatest sculptors of the twentienth century – being known as the artist who brought new shapes and concepts in sculpture. Brâncuşi's uniqueness resides in the fact that "unlike most sculptors before and since, he executed all his works himself by hand. He believed in old-fashioned hand-craftsmanship. Direct carving, he said, was the 'true road to sculpture'. Yet not only did he frequently have his marble works cast in bronze- thus denying the autonomy of the medium – but the extremely subtle and refined surfaces, on which he worked for days and weeks in solitude like a secular monk, carefully conceal all trace of his hand so that they look as if they have been machine-tooled' (Honour&Fleming, 2005 Chapter XX/ part 5)

As an artist, Brâncuşi distinguishes in his beginnings with a realistic period in which he creates remarkable works like: *The Bust of Doctor Carol Davila, The statue of a man* – in which the artist shows the muscles of a human body.

Through his traditional methods, Brâncuşi has reached perfection as his sculptures although carved by hand are so precise that they look like those made by machines. This is why the Romanian sculptor is so appreciated worldwide. Moreover, his desire to improve and refine his sculptures made him create more versions of his sculptures. His talent was unique and his dedication to sculpture was supreme.

"Sculptor Jacques Lipchitz, whose studio was below Brancusi's, recalled a constant tapping like a dripping faucet that kept him awake. It was Brancusi, continually chipping away until he reached and absolute bedrock image. *Create like a god, command like a king, work like a slave*, Brâncuşi said." (Strickland, Boswell. 2007:133)

Romania – Brancusi's National Day

On 19th of February 2020, Romania celebrated 144 years from the birth of the most important sculptors in the world - the Romanian Constantin Brâncuşi.

The recognition for Brâncuşi's work has gone beyond the Romanian boarders, his vision and art is well known worldwide.

Since 2005, Romania declared the 19th of February of each year – a National Day – the day of Brâncuşi. This gesture represents a moral gratitude and a way of asking for forgiveness for the communism years when the art of Brâncuşi was refused and barely known by the Romanian public. In 1951, the Romanian academicians turned down Brâncuşi's offer – that of donating the works from his Parisian workshop. They considered that "the artist does not respect the classical patterns of the field in which he was active and accused Brâncuşi that he had made contact with the Parisian artistic world about which they said that it influenced him negatively."(Padurean, 2017, online article: *History Page: Brâncuşi, decorated by the king, humiliated by communists*)

The refusal of the Romanian authorities made Brâncuşi give up his Romanian citizenship and ask to become a French citizen. After he obtained his rights in the country that adopted him, all his works where donated to France.

After the fall of communism, Romania tried to repair several faults of its past. This is also the case of Brâncuşi and since the 1990's our country has constantly tried to regain and promote among its teenagers the huge personality and work of the sculptor Constantin Brâncuşi. It has succeeded but it has also failed to restore or to bring back some very important parts of Brâncuşi's art or heritage.

For example, the memorial house of Constantin Brâncuşi - from his native village Hobiţa - has crashed and the authorities have not yet found a solution to restore it and to make it available to the general public. Brâncuşi's house was the place from which he took most of his inspiration, it was the place that defined his childhood and shaped the future sculptor.

Another example of poor management was represented by the entire prolonged discussion over the fact that the Romanian state had to buy – to bring back home – "Wisdom of Earth" - an important sculpture of Brâncuşi. The entire process involved both the Romanian state and its citizens who were asked to donate for the acquisition of the sculpture. The campaign *Brâncuşi is mine* was a failure and the masterpiece – until today – although it has Romanian owners; they have not reached an agreement with the authorities in order to expose this work of art in a Romanian museum.

Despite all the controversy and difficulties, the Romanians recognize and are proud of Brâncuşi's work.

The rise of one of the greatest sculptors in the world

In 1876 on 19th of February, in Hobiţa village – Peştişani commune from the county of Gorj, Romania, the great sculptor Constantin Brâncuşi was born. His childhood house was entirely made of wood and he was the sixth child of his family. The image of his natal village marked his entire work, as he said: "I would have been nothing and I would have carved nothing without Hobiţa, without its gates and fountains, which meant, for me, a real Belle- Arte Academy" (Iliescu, 2019, online article: Constantin Brâncuşi: I would have been nothing without Hobiţa)

In fact his entire work is a combination between the Romanian popular art and the Parisian avangarde. His genius as a sculptor resides in the mixture of simple shapes which were embellished by the refinement of the Parisian époque.

Brâncuşi's spirit was that of an artist who, since early childhood was rebellious and restless. Although his mother wanted Brâncuşi to become a priest, he had other plans. At 7 years old he decided to run to Târgu-Jiu and got a job as an apprentice in a local joinery. Afterwards, when he was only 13 years old he came to Craiova where he enrolled in the School of Arts and Crafts. He had a thirst in learning the secrets of carving and he practiced his talent on different materials including wood. Here, at Craiova, he created his first works and he also took part, for the first time at an exposition. Brâncuşi declared that: "in Craiova I was born for the second time" (Rezeanu, 2008: 33).

In Craiova, Brancusi "spend the following ten years, initially working crushingly long hours in cafes and restaurants washing glasses and dishes or waiting on tables. For a country boy, Craiova must have appeared awesome.... It has been supposed that Brancusi's first experiences of sculpture must in fact have been the fin-de siècle traditional funerary monuments he would have encountered locally, for in Craiova in

those days, apart from the wayside crosses of the fountains situated at the outskirts of the town, not even a single public monument existed." (Miller, 2010:.21)

In 1898 he successfully finished the School from Craiova and decides to move to Bucharest as he wanted to study at the National School of Beau Arts.

Brâncuşi was a hard-working, disciplined student who quickly attracted the attention of his teachers. His talent comes to light during his studies and from that period we have works like: *Vitellius* – the bust of a well-known politician from the region of Craiova – Gheorghe Chitu, the *Laacoon Head* as well as an *Ecroseu*.

At the age of 27 he receives his first order as an artist: to make the bust of the general Carol Davila. Brâncuşi receives a first tranche of money at the beginning of the project and he was supposed to receive the second part after he presents his masterpiece. When the sculpture is ready, it is presented in front of a council. Unfortunately, the result is unsatisfactory because most of the members from that council disagree with the way Brâncuşi reproduced the figure of Carol Davila.

Upset and disappointed by the fact that the council could not see and understand his talent, Brâncuşi made a drastic decision – to go to Paris where he remained until the end of his life.

The Parisian Period

Having no money, Brâncuşi set out for Paris on foot. He went through Budapest, Vienna, Zurich, and Munich, and after two years he arrived in Paris. Before arriving to Paris, Brancusi worked in Munich as a stone carver. In 1904 he settled in Paris for good. He studied at the Ecole des Beaux Arte.

Brâncuși began to exhibit his sculptures in Paris and was very successful

In 1906, at the Autumn Salon, in Paris, Brâncuşi exposed *Pride* which was created in 1905 and *Boy's Head* created in 1906. During this event he met the French sculptor Auguste Rodin who asked him to came and work in his workshop. Brăncusi accepted his offer although it was not for a long period of time as he said: "in the shade of the big trees, nothing grows" (online website of the Romanian Cultural Institute, 2017: Beginnigs: Constantin Brâncusi and Auguste Rodin)

Brâncuşi decided to leave Rodin's workshop in order to find himself as an artist and to be able to create independently without any type of influence that he could have had if he continued to remain in the presence of his fellow-sculptor. After refusing to work with Rodin, Brancusi decided to develop, study and recreate the Romanian peasant sculpture.

Therefore: "The great merit of the Romanian artist consists in the fact that he did not follow an already existing direction, he wanted a new one in the modern sculpture, detaching himself from the models and percepts that he had followed in the beginning of his career and, on the contrary, he made a cohort of artists worldwide follow him. And, his innovative approach is all the more relevant since he has been alienated from any nihilistic approach fact which caused a reconsideration of the essence and valuable resources of sculpture." (Turcanu, 2007: chapter IX/ 3.Sculpture)

After this important moment that marked the future of Brâncuşi's art, the artist decided to rent his own workshop in Paris. This was the place in which he had created the majority of his masterpieces, but we have to take into consideration that he had kept a close relation with his native country – Romania. There were moments when the artist was asked by Romanian authorities or private personalities to create a certain piece of art. As an example we can take the great ensemble from Târgu - Jiu. It was realized

while Brâncuşi was in Paris but the works were thoroughly monitored by the artist. He created the sketches with the exact dimensions, ordering the material from which they had to be assembled. This great ensemble from Târgu-Jiu comprises three sculptures: the Endless Column, The Gate of the Kiss and the Table of Silence.

The Endless Column is one of Brâncuşi's most famous works. "Depending on how you regard it, the column either consists of stacked identical elements or of a single element with identical indentations – yet in either case it is an accumulation. With neither a below or an above, without beginning and without end, rising skyward like Jacob's ladder, it gathers together ground and sky" (Hertzberger, 2000:103)

Brâncuşi achieved through his masterpiece – *the Endless Column* "... accumulations of elements, each bearing and borne by the other, every one a plinth for the next, each a base and a sculpture for another. Unlike classical sculptures placed on a pedestal to elevate then to a higher plane, here all the elements are equals, relating to one another as dependent yet autonomous components."(Hertzberger,2000:103)

The monumental ensemble from Tărgu Jiu (the *Endless Column, The Table of Silence and The Gate of the Kiss* – this last masterpiece is also entitled *The Gate of the Heroes*) which wass finished in 1937 has dedicated to the honor of the Romanian heroes killed for the defense of the homeland in the First World War.

Brâncuși's private life

"For much of his life Brăncuşi was in the habit of jotting down his thoughts on random pieces of paper, some of which had been published here and there, but it was not until the catalogue of the exhibition La Dation Brăncuşi 2001 (Dessins et archives) was published in 2003". (Miller,2010:1)

At his birth, Brâncuşi's mother dreamt that he would become a priest. Her dream did not come true as her son was going to become the *Father of Modern Sculpture*. He did not follow the common steps in life: get married and have kids. He left his native place Hobiţa since he was a young boy and followed his dreams. Paris was the place where Brâncuşi met many women who would often visit him in his workshop from Montparnasse. Women were impressed by his strong personality and it did not matter if they were female-aristocrats or princesses, writers or sculptors. Some of these women have inspired Brâncuşi in creating sculptures like *Miss Pogany* or *Princess X*. The sculptor *Miss Pogany* was named after Margit Pogany – a young Hungarian artist. *Princess X* is a sculpture that represented the princess Maria Bonaparte who had a relationship with the sculptor.

Nancy Cunnard- a British aristocrat was the muse of many personalities among which Constantin Brancusi. He created two sculptures that were dedicated to Nancy: A sophisticated young girl and The Blonde Black Woman.

The Irish woman *Eileen Lane* was the one who is said to have come with Brâncuşi in Romania. He took her to his native village, serving her with traditional Romanian food and showing her the places of his childhood. She was also the one who inspired him to create a sculpture named Eileen Lane. Unfortunately, there was a difference of 20 years between them so marriage was impossible.

Leonie Ricou was a rich woman who belonged to the high Parisian society. She inspired Brâncuşi for the work Madame L.R. The value of this sculpture was estimated to 20 million Euros

Renee Irana Frachon was The Sleeping Muse (1910) for Constantin Brâncuşi. This sculpture has several versions because the artist wanted to create the image of the

woman by using different materials like: bronze, marble or wood. We can see versions of these sculptures in museums from New York and Paris.

Agnes and Florence Meyer

Agnes Ernst Meyer was a journalist who met Brâncuşi in 1910; she inspired him to create his work *La Reine Pas Dedaigneuse*. This sculpture is entirely made of black marble. Moreover the daughter of Agnes – Florence Meyer is said to be the inspiration behind Brâncuşi's sculpture *Miracle*.

Vera Moore

Vera Moore – a talented pianist - was, probably, one of the most controversial women from Brâncuşi's private life. She is said to have been the mother of Brâncuşi's only child – a boy named John Constantin Brâncuşi Moore. He was never recognized by his famous father but the story behind this mystery remains.

Therefore besides other themes, women were also an inspiration for Constantin Brâncuși.

Brâncuşi's works

Brancusi's works are displayed in "the foremost museums of Europe and the USA and some of his sculptures, such as the famous Mlle Pogany, have achieved iconic status. Less well known is his reconstructed studio complex in Paris, part of the Beaubourg district's Centre Pompidou. A veritable Gesamtkunstwerk that encapsulates Brancusi's life and work, the 'Atelier Brancusi' is his most enduring legacy" (Miller, 2010: 8).

Brancusi was appreciated for his works although he had a reluctance "to allow his friends to write about him, or to furnish them with photographs of his works he himself took after being taught the rudiments of photography by Man Ray, explains why only one monograph was published on him immediately after his death in 1957, by the English architect David Lewis". (Miller, 2010:10)

Brâncuşi's work reveals his passion "of rough-hewn wood, his tendency to conjoin wood with polished metal or stone, and his infusion of metaphysical significance into simple, reductive forms" (Wilmarth, 1989:10)

Brâncuşi was a very creative sculptor leaving an impressive collection of sculptures. He started creating from an early age and he defined his talent by using and achieving perfection while working with different materials like: wood, marble, bronze and metal. His works represent animals, people or objects and each piece of art is remarkable when it comes to its simplicity and accuracy. Although his art can be perceived as abstract, Brancusi disagreed and "he insisted on the representational nature of his works, asserting that they disclosed a fundamental, often concealed, reality" (online presentation of Constantin Brâncusi)

"Though his sculptures do admittedly have titles, these do nothing to inhibit the observer from seeing them as something else. They can often be birds, wings and propellers but also objects conceivably from another planet or materialized from outer space: aquatic creatures, dug-up parts of some machine, perhaps agricultural implements, primitive art, objects found on the beach, lots of those. And because there is no longer a distinction between ancient and futuristic, organic, fossilized, solidified, eroded and cast, the notion of time in extinguished" (Honour&Fleming, 2005 Chapter XX/ part 5)

Brâncuşi's sculptures achieve a touch of modernism through simple forms without any type of ornaments and the sculptor himself can be compared to a "ballet dancer who controls the most prodigious tension of so many muscles and tendons, to transform it into a single elegant gesture. In the way that they still have to attain an explicit form, so to speak, his objects are in fact protoforms which become what they are through interpretation. They are concepts that are a summation of the complex ides which reside in them as layers, to be evoked by association rather than being explicit." (Honour&Fleming, 2005 Chapter XX/ part 5)

Brâncuşi's works are divided in three periods that define the sculptor's life. In the first period we find the works that were created during his education – his becoming as an artist. Sculptures like: The bust of Gheorghe Chiţu (1897-1898), Vitellius (1898), The Head of Laocoon (1900), Corner Chair (1900), The bust of Ion Georgescu (1902), The bust of Carol Davila (1903-1912), Pride (1905), The Child (1906) and so on.

The second period is made up of works that were created in the point when the sculptor was defining his talent. Works like: The Ordeal (1906-1907), The Sleeping Child (1906-1908), The head of a young girl (1907), Wisdom of Earth (1907), the Kiss (1907-1908), the Sleep(1908), Danaida (1908), Wisdom (1908), Maiastra I (white marble -1910), The Prayer (1910) and so on.

Maiastra is the first sculpture in which Brâncuşi focuses on one of his dominant themes of his career that will reappear constantly until the end of his life. This idea is represented by birds – the messengers of freedom. Brâncuşi "presents his mythical birds in highly stylized three-part division; whether seen frontally or in profile, the legs and plumage are a rigid vertical relief, the breast above them is an ovoid swell, and its upper curve bends inward to delineate the arch of the neck, which terminates in an open beak". (Lanchner, 2010:.5)

Maiastra is a masterpiece and Brancusi has made several versions of this theme: the bird. In each version he wanted to have a "unified conception of the bird form, however his realizations of it might differ in material and shape" (Lanchner, 2010:.5)

Maiastra has rendered suggestively and symbolically the search for an ideal to be achieved by the man in general and the artist in particular. In Maiastra the artist created the feeling of jerking up, of lifting and overtaking emerges (the bird does not have a beak and wings, it only has an elongated body).

The third period which is also the last one is represented by his mature works. Sculptures like: Prometeu (1911), Maiastra II (bronze) 1911), The Muse (1012), Maiastra III (1912), The Muse (1912), Miss Pogany I (1913), The Sorceress (1916), The Column of Kiss (1916), Princess X (1915-1916), Miss Pogany II (1919), Birds in the sky (1922-1923), Miss Pogany III(1933), Flying Turtle (1940-1945) and so on.

Between 1913 and 1923, Brâncuşi also "carved and sculpted wooden figures that were almost ungainly, additive, bizarre and notched. They evoked a dissonant counterworld to the purity of form that predominates in his oeuvre. Such titles as Adam and Eve, The Prodigal Son, Chimera or Witch indicate that we are dealing here with an animalistic, grotesque, dark and even demonic world, from which Brancusi was to withdraw in 1922."(Ruhrberg, Schneckenburger, Fricke, Honnef. 2000: 424-425)

Miss Pogany is another important motif of the sculptor. He has several versions of this sculpture, each of them representing a young Hungarian woman by the name of Margit Pogany. She visited Brâncuşi in his workshop in Paris and the sculptor took her as a muse: "Each time he began and finished a new bust (in clay). Each of these was beautiful and a beautiful likeness, and each time I begged him to keep it.... But he only

laughed and threw it back into the box full of clay that stood in the corner of his studio." (Lanchner, 2010: 9) This desire for precision shows, in fact, the greatness of Brâncuşi who was not afraid to create the same sculpture over and over again until he gained full satisfaction.

All this impressive collection of sculptures is spread around the world in several museums or private collections. Part of his works can be found in Craiova, Romania – the city in which Brancusi started to cultivate his talent. The Museum of Art from Craiova hosts Brâncuşi's sculpture. The Museum itself has a great history: it was owned by the wealthy Jean Mihail. He built the palace (1900-1907) according to the plans of the French architect Paul Gottereau. The palace was designed to be a private property. Inside, there have been used high –quality materials: chandeliers made of murano crystal, carrara marble stairs, upholstered walls with Lyon silk, paneling, style furniture; all these give the palace elegance and refined taste. Over the years, in the palace, there were hosted Carol I with his family in 1913 and 1915, King Ferdinand, personalities from the Polish, German and Russian army.

The palace was donated by his owner and in 1954 it was inaugurated as the Museum of Art from Craiova. The museum shelters numerous works of art from the Dutch, Flemish, Italian and French schools. Inside the museum, the Brâncuşi's collection covers an important surface at the ground floor and at present a special – separate construction for Brancusi's collection is under construction.

Brâncuși's works that are exposed in the museum from Craiova belong to the first period of creation. More precisely there are six works:

- 1. Vitellius (gypsum 1898) which is the oldest sculptor from Brancusi;
- 2. Pride (1905) cast in bronze;
- 3. Boy's Head;
- 4. The Kiss (1907) made of stone.
- 5. Woman's thigh or torso (1090) made of marble. This sculpture was highly appreciated by the public each time it was exposed.
- 6. A version of Miss Pogany casted in bronze.

 The Museum of Art from Craiova is only an example of public place where we can admire Brâncuşi's works. The rest of his sculptures have in exposed in museums from: Germany, Italy, Spain, France or America.

Conclusions

The Romanian Constantin Brâncuşi was one of the most important sculptors worldwide. His talent consisted in the fact that "he eliminated all decorative elements from his work and simplified forms to an extreme degree, in works which range from the bulky and powerful to the graceful and elegant, for example Fish, Maiastra, Sleeping Muse and Bird in Space. Quite apart from the works themselves, Brâncuşi's achievement was to make other sculptors once more conscious of pure form as an end in itself, and this marks him out as one of the most influential artists of the twentieth century." (Wenham, 2003:118)

Brancusi was considered an artisan who knew nothing of "pupils, assistants, stone-pointers, polishers or cutters. He does everything for himself. His materials are always true to him, always faithful. He has approached them from every angle. Brancusi, as we know, is a Romanian of the old peasant stock of that beautiful country.... He works on without masters nor disciples, without advertising, without toadying art

critics." (Miller, 2010: 16) Through his Parisian period, Brancusi was often called as the last Parisian sculptor and artist who had Romanian origins.

Therefore, starting from the Romanian folk art, using the elements that are specific to the peasant art, Brancusi's innovative art achieves its universal artistic values which are unanimously recognized worldwide.

References:

- Hertzberger, H. (2000). Space and the Architect Lessons in Architecture 2, Rotterdam: 010 Publishers.
- Honour, H., Fleming, J. (2005). A world History of Art Seventh Edition, London: Laurence King Publishing.
- Iliescu, V.- Constantin Brâncuşi: Nu aş fi fost nimic fără Hobiţa. Retrieved from: https://coltisorderomania.ro/2019/05/26/constantin-brancusi-nu-as-fi-fost-nimic-fara-hobita/.
- Lanchner, C. (2010). Constantin Brâncuși- The Museum of Modern Arts, New York: Oceanic Graphic Printing, Inc.
- Miller, S. (2010). Constantin Brâncuși, London: Reaktion Books.
- Padurean, B. Pagina de istorie: Brâncuşi, decorat de rege, umilit de comunişti. Retrieved from: https://www.rfi.ro/cultura-97961-pagina-de-istorie-brancusi-decorat-rege-umilit-comunisti/.
- Rezeanu, P. (2008). Muzeul de Artă Craiova Palatul Jean Mihail, Râmnicu-Vâlcea: Conphys Publishing House.
- Romanian Cultural Institute (2017). Beginnings: Constantin Brancusi and Auguste Rodin.

 Retrieved from: https://www.icr.ro/pagini/inceputuri-constantin-brancusi-si-auguste-rodin.
- Ruhrberg, K., Schneckenburger, M., Frick, C., Honnef, K. (2000). Art of the 20th Century edited by Ingo F. Walther, Part I Painting by Karl Ruhrberg, Spain, Taschen.
- The Art Story, Constantin Brâncuşi: French-Romanian Sculptor and Photographer. Retrieved from: https://www.theartstory.org/artist/brancusi-constantin/.
- Turcanu, I. (2007). Romanians' History: with a wider view over the Romanian culture, Brăila: Istoros Publishing House.
- Strickland, C., Boswell, J. (2007). The Annotated Mona Lisa. A crash course in art history. From prehistoric to post-modern, Kansas City: Andrews McMeel Publishing, LLC.
- Wenham, M. (2003). Understanding Art A Guide for Teachers, London: Paul Chapman Publishing, A SAGE Publications Company.
- Wilmarth, C. (1989). Christopher Wilmarth The Museum of Modern Art New York, Published on the occasion of the exhibition "Christopher Wilmarth", New Jersey: Village Craftsmen/ Princeton Polychrome Press.

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