

NEW CONTRIBUTIONS TO THE
STUDY OF THE LIFE AND WORK OF
VINKO FRANČIŠKOVIĆ (1919-1984), PIONEER
OF CROATIAN CARDIOTHORACIC AND
TRANSPLANTATION SURGERY

NOVI PRILOZI O ŽIVOTU I RADU
VINKA FRANČIŠKOVIĆA (1919. – 1984.)
PIONIRA KARDIOTORAKALNE I
TRANSPLANTACIJSKE MEDICINE U HRVATSKOJ

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SUMMARY

Aim. To explore personal biography of Vinko Frančišković (1919-1984), to improve the understanding of the beginnings of Croatian cardiothoracic and transplantation surgery.

Methods. Comparative critical analysis of written published materials, archival materials and information collected through oral history interviews.

Results. Vinko Serafin Frančišković was born in Praputnjak, a settlement of the eastern surroundings of Rijeka, Croatia. He was raised up in the Italian language and culture by his

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aunt, a mother's sister and her husband. He went to the Royal Classical Grammar School Giovanni Prati in Trento. On July 15, 1943, he defended his thesis, titled *A contribution to the surgical therapy of fractures of the femoral neck at the Faculty of Medicine, University of Padua*.

Conclusion. *The represented data about Vinko Frančišković's life, especially those concerning his secondary and higher education, explain some of his crucial personal traits and his later professional pathway.*

Key words: *Frančišković, Vinko; biography; transplantation; surgery; history; Croatia.*

INTRODUCTION

Vinko Frančišković is well known for his major contribution to the first successful kidney transplantation in Croatia (the second, in the former state Yugoslavia, with the first one performed only a few months earlier in Slovenia), enabling the spread of the transplantation medicine to Zagreb, Sarajevo, Skopje, and other centers in the region. His pioneering work in the field of cardiothoracic surgery, nevertheless, has been far less studied and published, while personal data from Vinko Frančišković's life have been so far almost completely neglected. In a strong belief that one's life path can be helpful in explaining the development of one's ideas, we collected and explored a part of the family archives and memories, and confronted them to the sources found at various institutions. The results of the investigation are presented in this short communication.

MATERIALS AND METHODS

We studied the published literature, mostly devoted to Vinko Frančišković's work in transplantation surgery, interviewed the only daughter of Vinko Frančišković, Mrs. Zorica Petrošić, collected materials from the Frančišković family archives, the archives of the University of Padua (Italy) as well as the archives of the *Giovanni Prati* Grammar School in Trento (Italy), and checked the data at the Rijeka Registry Office and Rijeka State Archives.

The method employed was comparative critical analysis of the written published and unpublished materials, confronted with oral histories.

RESULTS

The Frančišković family originates from the eastern surroundings of Rijeka, including the settlements of Meja, Krasica, Praputnjak, and the vicinities. The family has spread numerous branches, many of which cannot trace their common origin any more.

Vinko Serafin Frančišković was born on September 3, 1919, to the municipal clerk Anton Frančišković and Marija née Gašparović. The child was born in Praputnjak, then the territory of the Kingdom of Serbs, Croats, and Slovenians (after 1929, the country will be named *The Kingdom of Yugoslavia*). Frančišković was however baptized on January 7, 1920, that is, more than four months later (indicating sometimes a longer absence of the father, or a fragile health status of the child): this was performed by the catechist August Gecan at Frančišković's new home, Pećine No. 234, with the merchant Franjo Rossi and Ivka Smokvina as a godfather and a godmother, respectively. Vinko Frančišković's father namely died very soon, and the mother, having other children to take care of, made a tough decision to let Vinko to live with her sister who lived with her husband Senkovich childless in greater prosperity. (The Senkovich family had first lived in Pećine, and later, in the 1930s, in a new villa in what is today known as Brajšina Street.)

Vinko Frančišković was raised up in the Italian language and culture. The Italian accent will remain his recognizable characteristic through his entire life, but he will never change his Yugoslav declaration and citizenship.

On May 16, 1929, Vinko Frančišković was confirmed, and a few years later sent for education first to Turin (1), and then to Trento. Here, Frančišković was schooled at the Archiepiscopal Grammar School (*Liceo Ginnasio Pareggiato Arcivescovile*), but took the A-level exam at one of the oldest and best institutions of that kind in the whole northern Italy – the Royal Classical Grammar School (*Reale Liceo Classico*), named after *Giovanni Prati*. Frančišković had to repeat the parts of the exam related to Italian language and mathematics, but

29	Frančišković Vinko Gašparović Marija = 3 settembre 1919 =	Sussek (Yugoslavia)	*) atto nascita 9/4 1938 Com. Solato di Italia in Sussek.
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Figure 1. Vinko Frančišković's data in A-level exam register. Courtesy of *Liceo Classico Giovanni Prati*, Trento.

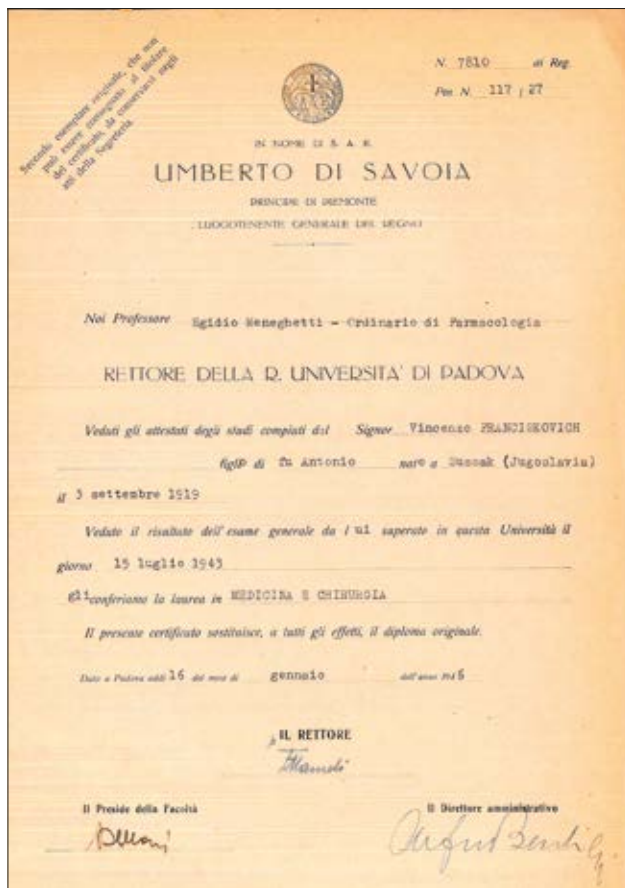


Figure 2. Vinko Frančišković's University diploma, 1943. ASUP, Archivio del Novecento, *Fascicoli di studente*, Facoltà di Medicina e chirurgia. Franciscovic Vincenzo, matr. 117/27. Courtesy of University of Padua - Servizio Archivio Generale di Ateneo.

passed the exam in October 1937. Immediately after obtaining diploma from the Trento *Liceo*, Vinko Frančišković was matriculated at the Padua Faculty of Law on November 4, 1937, but, after two and a half months, on January 20, 1938, he asked to be transferred to the Faculty of Medicine. In Padua, one of the oldest medical schools in Europe (founded in 1222), Frančišković obtained the best marks in *Clinica chirurgica generale e terapia chirurgica* (30/30 *cum laude*), *Clinica odontoiatrica* (30/30), *Clinica ostetrica e ginecologica* (29/30), and *Anatomia chirurgica e corso di operazioni* (29/30), while the worst marks were associated with the courses of *Anatomia umana* (18/30), *Fisiologia umana* (19/30), and *Patologia generale* (19/30), which obviously could have foreseen

his further career in surgery. On July 15, 1943, Vinko Frančišković defended his thesis, titled *A contribution to the surgical therapy of fractures of the femoral neck*, obtaining 95 out of 110 points (the mentor had been Professor Galeno Ceccarelli, 1889-1970, the pioneer of Italian anaesthesiology, abdominal and cardiothoracic surgery).

Less than two months later, Italy surrendered to the Allies and withdrew from the Second World War. Frančišković joined the Yugoslav partisan army (heading the surgery teams of the 6th and the 19th Division, the 8th Corpse, and the 4th Army, respectively) and, after the War had ended, he remained in uniform, specializing surgery at the Belgrade Army Medical Academy (VMA), learning from the six years older Isidor Papo and other greatest authorities of the time. Later, Frančišković worked for about two years in Algeria, and in the military hospitals in Lovran (1954-1956) and Pula (1956-1961) (2). Here, over time, he had the opportunity of making indebted several top leaders of the Yugoslav communist regime, who spent time at the nearby Brijuni Islands, including Edvard Kardelj (who got injured while diving), or Aleksandar Ranković (after his son's bicycle accident). Ranković invited the entire Frančišković's surgical team for dinner on the Brijuni. During the dinner, one doctor, obviously taken by hard liquor, replied to Ranković, complaining of mosquitos, that *mosquitos are where cattle is*. The entire party at the table retained the breath: Ranković, the almighty lord of the notorious secret police and the vice-president of Yugoslavia, however, only smiled, to the greatest relief of the company. At bidding farewell, Ranković asked Frančišković if he could do anything to repay Frančišković for the enormous service, and Frančišković replied immediately: *You could help me get demobilized...* And so it was: Frančišković finally left the army, after more than fifteen years in uniform (Zorica Petrošić, February, 2015).

In 1961, Frančišković took over the Surgery Department of the Sušak Hospital (Surgery Clinic since 1962) from the hands of Janko Komljenović. Over time, Frančišković became professor (Assistant Professor in 1962, Associate Professor in 1966, and Full Professor in 1971) and the dean of the Rijeka Medical Faculty (1979-1983), a member of the Central Committee of the League of Yugoslav Communists (1974-1978) (3), and, in 1981, a Corresponding Member of the Yugoslav Academy of Sciences and Arts (4). A few Frančišković's students and collaborators, later became university professors, like the urologists Tomislav Tićac (1920-1999), Petar Orlić (born 1940), and Željko Fučkar (b. 1945), a cardiovascular surgeon Duje Vukas (1941-2005), a dialysis pioneer Đurđa Matić-Glažar (b. 1942), and others. In Rijeka,

Frančišković lived on the 8th floor of the «Rijeka Skyscraper» (designed by the famous architect Umberto Nordio in the late 1930s), in the apartment previously inhabited by another surgeon, Dante Curri, who emigrated to Italy after the Second World War.

Learning from the best surgeons in Italy, Great Britain, and France, Frančišković has been credited with the foundation of cardiosurgery in Rijeka – introducing the bilateral heart catheterization in 1965; extracorporeal circulation in 1967; artificial heart stimulation in 1970; implanting artificial heart valves in 1970 (for the first time in Croatia, contemporaneously with B. Oberhofer at the Zagreb Sestre Milosrdnice Clinical Hospital) (5); coronarography in 1973 (the first coronarography in Croatia was performed by Branimir Budisavljević and Antun Šepić) (5); and the first aortocoronary bypass in Croatia (1977) (6).

In 1966, Frančišković founded the Dialysis Centre (in 1962, the first hemodialysis in Croatia was performed in Rijeka, while in 1963, the first peritoneal dialysis). The first kidney transplantation in Croatia was performed in Rijeka on January 30, 1971: the explantation from the living donor (the mother of the patient) was done by Vjerislav Peterković, while Frančišković himself did the transplantation (7-11), after several years of practice on dogs and pigs. The immunological part was prepared by Šime Vlahović (1932-1977), the head of the Rijeka Faculty of Medicine Physiology Department, while anaesthesiology was led by Vlasta Stržić. Besides having transplanted about 250 kidneys, Frančišković is known for founding the Yugoslav Dialysis and Transplantation Union (*Jugotransplant*, 1974) and for experimentally preparing liver transplantation (performed for the first time in Rijeka not before 2006). The Rijeka kidney transplantation technique was subsequently disseminated onto the hospitals in Zagreb, Sarajevo, and Skopje.

Frančišković published papers mostly in Croatian language and in Yugoslav journals (*Vojnosanitetski pregled*; *Liječnički vjesnik*; *Tuberkuloza*; *Medicinski glasnik*; *Acta chirurgica Iugoslavica*), but also – quite rare for those times – his article appeared in English, in the *British Journal of Urology*. Beside the topics related to cardio-vascular surgery, urology, and organ transplantation, he also published papers on the surgical treatments of pulmonary tuberculosis and bronchial carcinoma, and even a paper on brain death.

After being emerited in 1983, Vinko Frančišković died in Rijeka on May 7, 1984.

CONCLUSION

Every institution and professional community is expected to search for role models who might help students to identify themselves with them, and thus strengthen the fruitful links between the students and the institution. Certainly, one of the best choices Rijeka medical tradition has offered for that purpose is Vinko Frančišković. In order to *use* the model of Frančišković, nevertheless, his life and work have to be more profoundly studied and better understood, in particular the role of Italian Padua professors in Frančišković's determination toward surgery (and, later, cardiothoracic surgery), and how much the Ljubljana transplantation school and team influenced the development of transplantation medicine in Rijeka (12, 13).

APPENDIX: A LIST OF WORKS BY VINKO FRANČIŠKOVIĆ, AS REVEALED BY PUBMED

1. Francisković V, Matić-Glazar D, Vukas D, Vujaklija-Stipanović K, Cohar F, Orlić P, Dordević M. [Immunosuppressive treatment using cyclosporin in kidney transplantation]. *Lijec Vjesn.* 1986 Jun; 108(6):267-9. Croatian.
2. Francisković V, Marin S, Vukas D, Budisavljević B, Sepić A, Curuvija D. [Radicality of surgery in primary malignoma of the lung]. *Acta Chir Iugosl.* 1985; 32(1):19-26. Croatian.
3. Zec J, Franciskovic V. [An overview of therapy using regular dialysis and kidney transplantation in Yugoslavia]. *Cas Lek Cesk.* 1984 May 18; 123(20):593-8. Czech.
4. Francisković V, Matić-Glazar D, Sabolić J, Strizić V, Cohar F, Zuza B, Orlić P. [Oxalosis--a hereditary metabolic disease as a cause of terminal renal insufficiency]. *Acta Chir Iugosl.* 1984 Mar; 31(2):235-44. Croatian.
5. Zec J, Francisković V. [Status of treatment with regular dialysis and kidney transplantation in Yugoslavia]. *Lijec Vjesn.* 1983 Jul-Aug; 105(7-8):277-82. Croatian.
6. Zaninović N, Zelić M, Strizić V, Uravić M, Gudović A, Francisković V. [Use of peritoneal lavage in diffuse peritonitis]. *Acta Chir Iugosl.* 1980; 27 Suppl 1:167-72. Croatian.
7. Sepić A, Budisavljević B, Zelić M, Glavas M, Francisković V. [Stenosis of the renal artery and possibilities of surgical treatment]. *Acta Chir Iugosl.* 1978; 25 Suppl 1(1 Suppl):375-7. Croatian.
8. Budisavljević B, Glavas M, Sepić A, Francisković V. [Reconstructive bypass surgery of the aortoiliac and femoropopliteal segment for occlusion and circulatory insufficiency of the lower extremities]. *Acta Chir Iugosl.* 1978; 25 Suppl 1(1 Suppl):195-7. Croatian.

9. Steinfl G, Matić-Glazar D, Gudović A, Orlić P, Francisković V, Strizić V. [A contribution to the discussion about the establishment of brain death (author's transl)]. *Lijec Vjesn.* 1977 Sep; 99(9):557-9. Croatian.
10. Cohar F, Zec J, Stipančić A, Beleznaý O, Francisković V. [Renal disease, pregnancy and delivery of patient with transplanted kidney (author's transl)]. *Lijec Vjesn.* 1977 Mar; 99(3):178-80. Croatian.
11. Zaninović N, Budisavijević B, Zelić M, Francisković V. [Complications of echinococcosis]. *Acta Chir Jugosl.* 1977; 24(1 Suppl):219-20. Croatian.
12. Cohar F, Matić-Glazar D, Vukas D, Strizić V, Francisković V. [Transplantation of the kidney in children and young adolescents. Report of 8 cases]. *Acta Chir Jugosl.* 1977; 24(2):131-43. Croatian.
13. Velčić G, Zelić M, Dimec D, Gudović A, Uravić M, Vukas D, Budisavljević B, Sepić A, Francisković V. [Vascular complications in kidney transplantation]. *Acta Chir Jugosl.* 1977; 24(1 Suppl):411-6. Croatian.
14. Francisković V, Cohar F, Gudović A, Orlić P, Smokvina D, Strizić V, Tićac S, Velčić G, Vujaklija K, Zelić M, Zec J. [Postoperative experiences gained in 40 kidney transplantations]. *Lijec Vjesn.* 1975 Aug; 97(8):440-4. Croatian.
15. Francisković V, Cohar F, Gudović A, Orlić P, Smokvina D, Strizić V, Tićac S, Velčić G, Vujaklija K, Zelić M, Zec J. [Experiences gained in 40 cases of kidney transplantations]. *Lijec Vjesn.* 1975 Jun; 97(6):323-4. Croatian.
16. Kraljević L, Ivanisvić B, Francisković V. [Development, significance and news in experimental surgery of the Creation Socialist Republic]. *Lijec Vjesn.* 1975 Feb; 97(2):67-71. Croatian.
17. Vukas D, Anićić M, Cohar F, Francisković V. [Use of the pyelo-ileo-vesical anastomosis in the treatment of urologic complications following kidney transplantation]. *Acta Chir Jugosl.* 1975; 22(2):233-45. Croatian.
18. Marin S, Francisković V, Grković B. [Surgical and clinical problems of adenoma in relation to bronchial cancer]. *Plucne Bolesti Tuberk.* 1974; 26 Suppl 2:337-40. Croatian.
19. Francisković V, Vlahović S, Zec J, Orlić P, Peterković V. [Kidney transplantation--case report]. *Lijec Vjesn.* 1971 Aug; 93(8):849-57. Croatian.
20. Marin S, Francisković V. [Open lung biopsy]. *Plucne Bolesti Tuberk.* 1970 Oct-Dec; 22(4):315-24. Croatian.
21. Zec J, Tićac T, Zgrablić M, Anićić M, Gudović A, Francisković V. [30 months of experience with regular hemodialysis of patients with chronic renal insufficiency]. *Lijec Vjesn.* 1970; 92(6):641-53. Croatian.
22. Francisković V, Tićac T, Zec J, Gudović A. [Idiopathic retroperitoneal fibrosis]. *Lijec Vjesn.* 1969; 91(10):1083-9. Croatian.
23. Marin S, Francisković V, Matejčić M, Kuis M. [Diagnosis and differential diagnosis of diffuse lung diseases]. *Tuberkuloza.* 1967 Jan-Apr; 19(1):49-53. Serbian.

24. Marin S, Francisković V, Kuis M, Matejčić M. [Clinical and surgical evaluation of the operability of bronchial carcinoma]. *Tuberkuloza*. 1965 Jan-Apr; 17(1):155-61. Serbian.
25. Marin S, Franciskovic V, Matejčić M. [Role of the general practitioner in the early detection of bronchial carcinoma]. *Med Glas*. 1963 Nov-Dec; 17:433-8.
26. Kuis M, Franciskovic V, Martincic N. [Intralobar pulmonary sequestration]. *Lijec Vjesn*. 1962 Mar; 84:259-63.
27. Kraljevic L, Franciskovic V. [Retrosternal diaphragmatic hernia--Morgagni]. *Vojnosanit Pregl*. 1961 Aug; 18:679-82. Serbian.
28. Martincic N, Kuis M, Franciskovic V. [The problem of routine application of bronchography]. *Tuberkuloza*. 1959 Jul-Sep; 11:371-4.
29. Franciskovic V, Martincic N. Intrathoracic kidney. *Br J Urol*. 1959 Jun; 31:156-8.
30. Franciskovic V, Kuis M, Martincic N. [Our results of resection therapy of pulmonary tuberculosis]. *Tuberkuloza*. 1959 Apr-Jun; 11:211-4.
31. Franciskovic V, Martincic N. [Case of kidney papilloma]. *Vojnosanit Pregl*. 1958 Feb; 15(2):128-9. Serbian.
32. Franciskovic V. [Kidney resection]. *Vojnosanit Pregl*. 1957 Dec; 14(12):777-80. Serbian.
33. Franciskovic V, Kuis M. [Lung excision for pulmonary tuberculosis in the Military Hospital at Pula]. *Tuberkuloza*. 1956 May-Aug; 8(3-4):189-91.
34. Cukelj F, Franciskovic V. [Radical treatment of tuberculosis of the spine]. *Vojnosanit Pregl*. 1954 Mar-Apr; 11(3-4):99-100. Serbian.

REFERENCES

- 1 Hrvatski biografski leksikon [Internet]. Zagreb: Leksikografski leksikon Miroslav Krleža; c2009-2013 [cited 2015 March 2]. Frančišković, Vinko. Available from: <http://hbl.lzmk.hr/clanak.aspx?id=6247>.
- 2 Zelić M. Vinko Frančišković – utemeljitelj transplantacije organa. *Sveti Vid*. 2002; 7: 145-52.
- 3 Rukavina D. Prof. dr. Vinko Frančišković, 3. IX. 1919. – 7. V. 1984., *Acta Fac. Med. Flum*. 1984; 9 (1-4): 7-8.
- 4 Vukas B, Vukas D, editors. *Pogled sa Sušaka: nezaboravljene misli Duja Vukasa*. Rijeka: Otokar Keršovani; 2009.
- 5 Goldner V. Kardiologija, In: Živković R, Oberiter V, Vrhovac B, editors. *Povijest internističkih struka u Hrvatskoj*. Zagreb: Akademija medicinskih znanosti Hrvatske; 1998. p. 10-15.
- 6 Vukas D, Matić-Glažar Đ, Petrošić N. Vrijeme kirurgije – osvrt na djelo prof. Vinka Frančiškovića. *Acta Fac. Med. Flum*. 2000; 25(1-2): 84-9.

- 7 Orlić P. Povijest transplantacije bubrega u svijetu i u Hrvatskoj, *Med vjesn (Osijek)*. 2005; 37 (1-4): 37-41.
- 8 Fučkar Ž. Povijest urologije na Sušaku. Rijeka: DP Tiskara; 2006.
- 9 Fučkar Ž. Povijest transplantacije bubrega na Sušaku, *Medicina Fluminensis*. 2010; 46(4): 352-9.
- 10 Fučkar Ž, Markić D, Španjol J, Valenčić M. Povijest transplantacije bubrega u bolnici na Sušaku. *Acta Med Croatica*. 2011; 65: 323-9.
- 11 Markić D, Valenčić M, Maričić A, Španjol J, Rački S, Fučkar Ž. Transplantacija bubrega – 110-godišnja uspješna priča, *Acta Med Croatica*. 2012; 66 Suppl. 2: 59-63.
- 12 Zveza društev ledvičnih bolnikov Slovenije [Internet]. Ljubljana; [cited 2015 March 2]. Lorenčič M. 40 let prve presaditve ledvice v Sloveniji: večina zgodnjih presaditev ledvic je bila zelo uspešna. Available from: <http://www.zveza-dlbs.si/40.let.transplantacije.html>.
- 13 Zupanič Slavec Z, Slavec K. Heart surgeon Miro Košak (1919-2010) and his contribution to the development of cardiovascular surgery in Slovenia. *Acta Med Hist Adriat*. 2011; 9(1): 135-42.

SAŽETAK

Cilj. Istražiti osobnu biografiju Vinka Frančiškovića (1919. – 1984.) čime će se omogućiti bolje razumijevanje početaka hrvatske kardiotorakalne i transplantacijske kirurgije.

Metode. Kritička komparativna analiza objavljenih publikacija, arhivskih materijala i informacija prikupljenih metodom usmene povijesti.

Rezultati. Vinko Serafin Frančišković rođen je u Praputnjaku, naselju u istočnoj okolici grada Rijeke. Odgajan na talijanskom jeziku i kulturi, u obitelji majčine sestre i njezina supruge, pohađao je Kraljevsku klasičnu gimnaziju Giovanni Prati u Trentu. Dana 15. srpnja 1943. na Medicinskom fakultetu Sveučilišta u Padovi obranio je diplomski rad o doprinosu kirurškoj terapiji fraktura femoralnog vrata.

Zaključak. Prikazani podaci o životu Vinka Frančiškovića, posebice oni koji se odnose na njegovo srednjoškolsko i visoko obrazovanje, objašnjavaju neke od njegovih ključnih osobina i kasniji profesionalni put.

Ključne riječi: *Frančišković, Vinko; biografija; transplantacija; kirurgija; povijest; Hrvatska.*

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