

**The Eye Clinic's Visual
History: Zagreb School of
Medicine University of
Zagreb Ophthalmology Clinic
in Accordance with the
Preserved Photographic
Archive**



**O Očnoj klinici vizualno:
Očna klinika Medicinskog
fakulteta Sveučilišta u
Zagrebu slijedom sačuvane
fotoarhive**

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SAŽETAK

U ovom radu prikazana je novoosnovana Očna klinika Medicinskog fakulteta Sveučilišta u Zagrebu na temelju fotografske zbirke pohranjene u Odsjeku za povijest medicinskih znanosti HAZU. Zbirku je Odsjeku donirao povjesničar medicine i oftalmolog Vladimir Dugački. Zbirka se sastoji od fotoalbuma smeđih korica s ornamentima, dimenzija 22,5×15,5 cm, koji sadrži 12 monokromnih fotografija 13,5×8 cm Očne klinike te osam uvećanih fotografija formata 22,5×17 cm nalijepljenih na karton. Premda nisu datirane fotografije vjerojatno potječu iz razdoblja nakon otvorenja Klinike između 1923. i 1926. godine.

Neki od fotografiranih prostora prepoznatljivi su i okom laika (predavaonica, knjižnica, operacijska dvorana), dok se u funkciju onih ispunjenih aparaturom, može proklati tek uz neophodno medicinsko znanje i poznavanje razvoja struke. Namjera naručitelja ovih fotografiranja predstojnika Klinike Alberta Botteriija bila prikaz novoosnovane klinike, ne samo po prostoru u koji je smještena, aparaturi i instrumentima kojima je opremljena, već i po njezinoj specijalističkoj usmjerenosti i znanju koje se iz tog sustava generira. Ekspertizu Očne klinike definiraju specijalizacija i subspecijalizacija, usmjerenje spram određenog organa u skladu s razvojnim dosezima medicine toga doba. Klinika je novo i drugačije iskustvo prakse liječnika, fragmentiran fokus na dijelove organizma, umijeće njihovog sjedinjavanja u kliničkoj interpretaciji i artikulaciji, što se na simbolički način može iščitati iz fotografija. Svaka fotografija iz albuma klinike funkcionira za sebe, ali i kao dio narativne linije cjeline, potvrđujući sustav ove ustanove kao radilišta koje izrasta iz identiteta novoosnovanog Medicinskog fakulteta, njegove akademske i opće društvene uloge.

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ABSTRACT

The paper presents visual representation of the Albert Botteri's Eye Clinic in Zagreb in early 1920-ies. The analysis is based upon preserved 12 photographs contained in photo album as well as eight single enlarged photographs. Each photograph tells its own story, but is also a part of the full narrative, thus confirming the operating system of this institution as a workplace which stems out of the identity of the newly established School of Medicine and its academic and generally social role. The photographs were made by studio Foto Tonka in Zagreb. The full collection is preserved in the photo documentation submitted to the Division for the History of Medical Sciences of the Croatian Academy of Sciences and Arts, as part of a donation made by Vladimir Dugački.

KEYWORDS

Albert Botteri, Eye Clinic in Zagreb, studio Foto Tonka, Photographic collection of the Division for the History of Medical Sciences of the Croatian Academy of Sciences and Arts, Donation of Vladimir Dugački

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Odsjek za povijest medicinskih znanosti Zavoda za povijest i filozofiju znanosti HAZU

Za razliku od drugih klinika, čije su rane fotografije uglavnom snimili amateri, vizualna reprezentacija Očne klinike prepuštena je profesionalcu, poznatom zagrebačkom fotoatelijeru *Foto Tonka* koji je vodila Antonija Kulčar. Botteri je nedvojbeno svoju, ujedno i prvu Očnu kliniku u regiji želio predstaviti javnosti kao ustanovu usmjerene i organizirane funkcionalnosti, specijalizacije i prepoznatljivosti, ali i kao ogledalo svoje kompetentnosti i vještine opremanja kako bi stala uz bok sličnim europskim ustanovama.

U tom kontekstu sačuvane fotografije Očne klinike, koje su desetljećima ostale izvan društvenog pogleda, svojom ispraznjenošću od ljudi i tehnologiziranom hladnoćom čine svojvrstan antipod bujnom, razigranom životu koji uobičajeno proizlazi iz Tonkinog atelijera. Gotovo paradoksalno, taj vizualni ispis ustanove koja se bavi očima ostao je izvan očiju javnosti, premda su vjerojatno mnogi klijenti Tonkinog atelijera ondje katkada zatražili pomoć.

KLJUČNE RIJEČI

Albert Botteri, Očna klinika u Zagrebu, studio Foto Tonka, Zbirka fotografija Odsjeka za povijest medicinskih znanosti HAZU, donacija Vladimira Dugačkog

The University of Zagreb, as the first such institution in Southern Europe, was founded on October 19, 1874 during the reign of Ban Ivan Mažuranić. However, it had no medical school, an establishment which the region had to await for another forty-two years.¹ Why was the founding of a medical school such a stumbling block in the development of the University? Why was the Zagreb School of Medicine not established in 1874 as other faculties? A part of the answer lies in the fact that the combat against disease was at the same time the struggle for the liberation of the people; according to Michel Foucault, a person will not be completely and finally cured unless he is liberated first.² In the context of Austria-Hungary, in which Croatia existed, this process of personalisation was extremely slow, especially with regard to the formation of the health-care system. Unlike other faculties, the School of Medicine from the start required specialised and expensive institutions, primarily medical institutes and clinics, since they were inseparable components of the academic system of education. Therefore, this was seen as an aggravating circumstance and a burden to its establishment. Many years had been wasted in an attempt to raise money for the construction of these institutes, until finally, disregarding all objections, during the debate about the state budget at the session of the Parliament of the Kingdom of Croatia, Slavonia and Dalmatia on January 25, 1917, MP Milan Rojc proposed to the government the unconditional establishment of the School of Medicine in the academic year 1917/18, despite the fact that most institutes and clinics had not yet been prepared: "Respectfully to the high parliament, we do not have to wait for the construction of grandiose buildings. We just need to have enough, and—God forbid—we have plenty, of ill people, which is quite normal because we are the centre of a district which is large both territorially and in population".³ Indeed, this territory had been a strong argument of various parties to vote for or against the establishment and opening of the Zagreb School of Medicine, confirming Henri Lefebvre's view according to which it is recognisable in which way territorial space serves the existing system and how hegemony exploits it with the help of knowledge and technical expertise.⁴ Although the opponents constantly argued against it due to high costs, those in favour supported the argument about the need to construct medical buildings, clinics and institutes gradually, in order for the faculty to finally start functioning and that it contributes to designing a healthier society based on modern medical practices. At the very beginning of the School's activity, the only established teaching institution was the Department of Anatomy. In 1924, the Morphological-Biological Institute was established (which began its work in 1919 in the former school building at Široki Brijeg), also the Medical Chemical Institute (founded in 1918), the Physiological Institute (founded in 1918), the Pathological-Anatomical Institute (whose construction began in 1917 and was partially completed in 1922), the Department of General Experimental Pathology and Pharmacology (situated in the old building on Voćarska cesta in early 1919), the Institute of Hygiene (founded in 1921, temporarily housed in the premises of the Institute of Physiology before the completion of the premises in the building of the Epidemiology Institute at Zeleni brijeg). Finally, most of the clinics were established in 1920–1922.⁵

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Fatović-Ferenčić, "Borba za osnutak Medicinskog fakulteta Sveučilišta u Zagrebu".

2
Foucault., *Rađanje klinike, arheologija medicinskog opažanja*, 54.

3
"Rasprava o medicinskom fakultetu u Hrv. saboru, CXLVII sjednica sabora dne 26. siječnja 1917.", 45.

4
Lefebvre, *The Production of Space*, 419.

5
Bagarić, "Izgradnja Medicinskog fakulteta u Zagrebu", 33–47.

The earliest reports on the system, organisation and functioning of the School of Medicine, University of Zagreb, were published in the University Memorial Collection in 1926.⁶ It was a good opportunity to finally present the structure and organisation of the newly established faculty, so special attention was paid to photographing the institutes and the clinics. On that occasion, the Ophthalmology Clinic in Zagreb was also presented,⁷ the only one which entrusted the production of its photographs, partially those intended for the mentioned journal, to a professional photographic studio: the studio *Foto Tonka* in Zagreb.

I found this visual representation of the Eye Clinic interesting also because I was able to compare the photographs published in the Memorial Collection with those contained in the photo documentation submitted to the Division for the History of Medical Sciences of the Croatian Academy of Sciences and Arts, as part of a donation made by Vladimir Dugački.⁸ This is an album with brown decorated covers, whose dimensions are 22,5×15,5 cm, and which contains twelve black and white photographs, each 13,5×18 cm in size. The album also includes the same but enlarged photographs of the Eye Clinic; their format is 22,5×17 cm and they are pasted on cardboard. It seems that these photos, eight in total, were also a part of a larger album which was divided into separate pages. The Eye Clinic photo album and the preserved photographs outside it form a material narrative; they are performative items which communicate from the point of view of the commissioner, as the client, and the professional photographer, as the executor, of the commission, all inside a professional (academic and vocational) and wider social and cultural context. A part of the photographic collection is inside the album, while the photographs outside it are framed in passe-partout, which contributes to the tension, as well as the dialectics between the material photograph and the openness of its content in terms of layered interpretation. Looking at the picture of his mother, Barthes noticed the material nature of the photograph: "It was very old, on cardboard, its corners eaten away, in white sepia..."⁹, and then, suddenly, it started moving, it *unlocked*¹⁰ that which in medicine we refer to as implicit memory. The eye clinic photographs similarly complement and reconstruct the memory of this profession, enhancing it visually into a unique testimony of the first eye clinic at the very beginning of its operation and at the site where it is no longer located today. Each time the photographs are looked at, their fixed reality becomes an object of nostalgia for the time of the early development of the School of Medicine, when the establishment of the departments was connected to the rise of positive science and scientific optimism. Nostalgia, however, is only a fraction of it all, which inspires a glance back into the past of local identities, because the preserved photographs show all sorts of traces of the presence of the past in the present and multiple amounts of potential influence on those who will interpret them in the future.¹¹

6 *Sveučilište Kraljevine Srba Hrvata i Slovenaca u Zagrebu 1874–1924.*: spomenica Akademikškoga senata.

7

Since the Zagreb Medical Faculty was founded in 1917 as the first in the wider region, the Eye Clinic founded in 1923 was the first not only in Croatia but also in the wider area of the Kingdom of Serbs, Croats and Slovenes. In the context of Europe, such clinics already existed, so the Zagreb eye clinic was able to make its arrangement on the model of some of them. This fact is supported by the education of its head Albert Botteri, who specialized in ophthalmology with Ernst Fuchs, head of the Second University Eye Clinic in Vienna, worked as the first assistant of the Stefan Bernheimer Eye Clinic, and maintained intensive professional relations with Viennese clinics and colleagues. Cf.: Ivanišević, „Utjecaj Bečke oftalmološke škole na početke suvremene oftalmologije u Hrvatskoj”, 344–345.

8

The legacy of the ophthalmologist and historian of medicine Vladimir Dugački was bequeathed to the Division for the History of Medical Sciences of the Croatian Academy of Sciences and Arts by his daughter, historian Vlatka Dugački.

9

Barthes, *Svijetla komora: bilješka o fotografiji*, 87–88.

10

Edwards, "Photographs and the Sound of History", 39.

11

Edwards, "The Need for a 'Bit of History': Place and Past in English Identity", 150.

12

Rosen, "Medicine and Early Photography", 1330.

13

O'Connor, "Camera medica", 232–244; Clode, "History of photography in otorhinolaryngology in the 19th Century".

14

Clode, "History of photography in otorhinolaryngology in the 19th Century".

15

Kovač, "Fotografija u biopolitičkom kontekstu", 41.

16

Hannavy, *Encyclopedia of 19th Century Photography*, Vol 1, 89–99; Neuse *et al.* "The history of photography in dermatology. Milestones from the roots to the 20th century", 1492–1498; Milam, Ramachandran, "19th century dermatologic atlases in the early age of photography", 969; ogers, "The first pre- and post-operative photographs of plastic and reconstructive surgery: contributions of Gurdon Buck (1807–1877)", 19–33; Parent, "Duchenne De Boulogne: a pioneer in neurology and medical photography", 369–377; Clode, "History of photography in otorhinolaryngology in the 19th Century".

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A lot of photo-documentary material from different areas has been preserved for the period of the First World War, but there has been only one medical publication based on collections of preserved photographs, primarily a collection of negatives on glass owned by historian Neven Budak. The photographs are interesting from a historical, military, and medical point of view, especially as an argument in support of Dr Vatroslav Florschütz's innovation of a method which is in the literature referred to as the *Balkan Frame* or the *Balkan Method*. Compare: Fatović-Ferenčić, Pečina, *Iz Florschützova okvira. Kirurg Vatroslav Florschütz (1879–1967) riječju i slikom*. Matko and Ana Marušić comment on various aspects of war medical photography as a document with special emphasis on the Croatian War of Independence, outlining the specifics and role of war photography in the field of public health, surgery, medical diagnostics, microscopy, psychiatry and forensic medicine. Compare: Marušić, Marušić, "Ratna fotografija u medicini". More recently, photographs from the collection of the Croatian Museum of Medicine and Pharmacy of the Croatian Academy of Sciences and Arts have been the starting point in the publication of the following papers: Fatović-Ferenčić, Brkić Midžić, "Tuberkuloza i naličje grada: fotografije zagrebačke stambene bijede iz zbirke Vladimira Čepulića"; Fatović-Ferenčić, Brkić Midžić, "A Visual Memory of the Profession — a view of the photographs of the otorhinolaryngology department preserved at the Croatian Museum of Medicine and Pharmacy, Croatian Academy of Sciences and Arts"; Fatović-Ferenčić, Prgomet, *A Visual Memory of the Profession: The Department of Otorhinolaryngology and Head and Neck Surgery at the Zagreb School of Medicine Upon a Century of Its Existence (1921–2021)*. Also compare: Grgić, Pentz, Mandić, "Digital imaging in Ophthalmology".

18

Dugac, *Kako biti čist i zdrav: Zdravstveno prosvjeđivanje u međuratnoj Hrvatskoj*.

19

Božidar Špišić (1879–1957): after completing his medical studies in Graz in 1904, he specialized in orthopaedics in Austria and Germany. He was the founder of orthopaedics in Croatia; In 1908 he organized a private orthopaedic institute in Zagreb (the first in south-eastern Europe), and in 1915 the first Orthopaedic Hospital with orthopaedic workshops and a school for the disabled. In 1930, he founded the Orthopaedic Department in Zagreb, which he managed until 1945. His photo documentation has not been preserved, but some photographs were published in the book *Kako pomažemo našim invalidima: slike iz naše ortopedijske bolnice i invalidskih škola*, in which Špišić emphasised the importance and role of photography. Compare: Dürrigl, "Počeci rehabilitacije u Hrvatskoj", 939–942; Špišić, *Moj životni put (život jednog ortopeda)*; Fatović-Ferenčić, Kuhar, "Images from our orthopaedic hospital: Photography as a tool of orthopaedic strategies in Croatia during the First World War", 1109–1115.

Since the earliest appearance of photography internationally, it was doctors who were among the first interested in this medium, seeing it primarily as a tool for documenting and clearer observation of clinical cases, for giving a more accurate diagnosis, but also for drawing conclusions within the research process.¹² For example, we know that bacteriologist Alfred François Donné was the first to use photography for scientific purposes a few months after Niépce and Daguerre published their photographs. An early proponent of the use of photography was the ophthalmologist A. de Montmé of the Saint Louis Hospital in Paris, who, in co-authorship with his colleague Eduardo Meyer, published the first manual with an atlas of accompanying photographs.¹³ In the process of intensive institutionalisation of hospitals for the treatment of psychiatric patients, extensive clinical material becomes the starting point for all approaches in the classification, interpretation and diagnosis of mental illness. We are also familiar with a brilliantly documented study of hysteria conducted in 1870 by Jean-Martin Charcot. As early as 1875, two of his assistants used photography to document his views.¹⁴ In the 1970s, Alphonse Bertillon set the standard for an identity card with a photographic image, which in the late 19th century resulted in the global acceptance of Bertillon's identification system. Photography penetrated and gradually became part of the system of administrative, police, criminal and wider social control.¹⁵ There is almost no medical specialization which has remained indifferent to its use, as evident in a number of reviews published so far.¹⁶ On the other hand, papers which focus on, analyse and interpret the use and role of medical photography in war and peacetime conditions, and in shaping ideas about health, medical innovations and scientific achievements, changes in medical paradigms, and similar, are only exceptions in Croatia.¹⁷ This fact is all the more surprising because photography is an unavoidable part of all medical specialities, although its use is most often emphasised in the period between the two world wars, that is, in the context of public health and health education.¹⁸ However, it is less known that clinicians emphasised and used photography as a powerful tool in presenting clinical cases and diagnostics (especially after the discovery of X-rays) much earlier, and that they published the first photographs in available journals, such as *Liječnički vjesnik*, which is Croatia's oldest medical journal and has been published since 1877. Božidar Špišić, the founder of orthopaedics in this region, is considered to be a pioneer in the use of photography as a strong argument in biopolitics, especially in terms of rehabilitation and re-socialization of the disabled people.¹⁹ During the First World War, in addition to textual documents, many physicians published their photographic documentation taken on the battlefields. For surgeon and traumatologist Vatroslav Florschütz, the photograph was a document of personal operative practice, a visualisation of his original method, that is, an extension with a suspension on a beam, the improvised conditions in which he worked, patients and supporting staff, and the landscape he travelled through. He preserved this documentation in order to visually



Fig. 1 Lecture room. Division for the History of Medical Sciences, Croatian Academy of Sciences and Arts. / Sl. 1 Predavaonica. Odsjek za povijest medicinskih znanosti HAZU.

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PROMATRATI VIDENO | OBSERVING THE SEEN



Fig. 2 Lecture room. Division for the History of Medical Sciences, Croatian Academy of Sciences and Arts. / Sl. 2 Predavaonica. Odsjek za povijest medicinskih znanosti HAZU.
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document the text of his war journal.²⁰ After the Zagreb School of Medicine was founded, his workplaces were more intensively displayed during anniversaries, primarily in professional journals, but also in the University of Zagreb chronicle, so some of these photographs were taken by various professional studios at the request of the university chiefs. The original photographs of individual departments have been preserved to a lesser extent. In that sense, I would like to point out two albums from the Otorhinolaryngology Department of the Zagreb School of Medicine from the period of Ante Šercer and Branimir Gušić, which were the starting point for the recently set exhibition²¹ and two publications.²² The second preserved album and part of the photographs show the Albert Botteri Eye Clinic, which is the subject of this paper.

LOOKING AT THE EYE CLINIC PHOTOGRAPHS

At the beginning of 1922 a decision was made to situate the Ophthalmology and Neurology Clinic in the former public school building in Zagreb's Marulićeva Street.²³ The Eye Clinic premises were located on the first and second floors of the building.²⁴ Due to slow reconstruction works, it was open for use much later, on 11 January 1923, and the first patients were admitted already that year. Therefore, the *Kraljevska sveučilišna oftalmološka klinika* (Royal University Ophthalmology Clinic) was officially open that January with the inaugural lecture delivered by its chief physician, Albert Botteri.²⁵ The preserved photographs are precisely from the period when the clinic began its work, until the publication of the mentioned Collection, which was probably between 1923 and 1926.²⁶ The first photograph from the entire photo album shows a building in the former location in Marulićeva Street with an avenue of trees stretching on the east side of its front. The same view of the Clinic is also shown in the above mentioned group of selected enlarged photographs. The depiction of the building as the spatial element of the Department supports Foucault's view of spatiality which allows the object of scientific study to be framed in order to produce new knowledge.²⁷ The sequence, arrangement and especially the drama which the photographs contain focus the observer's attention on the sequences which build the story of the representativeness, medical and scientific potentials of the new medical institution. The monumental corner building shown in the first photo in the album provides this dominant framework, a testimony to the power and argument for the structure of the School of Medicine through the space in which the Eye Clinic is located and which encompasses it. No matter how mute and devoid of people these photos may seem, they still allow the disclosure of the logistics and a meticulously devised "setting and script" of the Clinic, as well as the client's need for interactive communication with the public. The photographs communicate their content to the observer through the energy which allures and projects its text through time, through its own rules and mediation.²⁸

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Fatović-Ferenčić, Tucak, *Surgeon at the Front: Vatroslav Florschütz's War Journal 1914–1918*.

21

The photographs are exhibited in the Hugo Botteri Hall at the University Hospital Centre Zagreb since 27 September 2021 on the occasion of the 100th anniversary of the Otorhinolaryngology Department and Head and Neck Surgery, Zagreb School of Medicine. Authors of the exhibition: Silvija Brkić Midžić, Stella Fatović-Ferenčić, Drago Prgomet; entitled: *U vremenskom pomaku: Otorinolaringološka klinika Medicinskog fakulteta u Zagrebu od analognog do digitalnog doba*.

22

Fatović-Ferenčić, Brkić Midžić, "A Visual Memory of the Profession — a view of the photographs of the otorhinolaryngology department preserved at the Croatian Museum of Medicine and Pharmacy, Croatian Academy of Sciences and Arts" 310–318; Fatović-Ferenčić, Prgomet, *A Visual Memory of the Profession: The Department of Otorhinolaryngology and Head and Neck Surgery at the Zagreb School of Medicine Upon a Century of Its Existence (1921–2021)*.

23

Later renamed to Kukovićeva Street, today Ante Kovačić Street.

The same building on house number 1 is today home of the Faculty of Pharmacy and Biochemistry.

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The building was intended for two clinics: the Eye Clinic on the first and the second floors, and the Neurology Clinic in the basement and the ground floor.

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Albert Botteri (1879–1955), ophthalmologist. He graduated in Vienna in 1904, where he worked in an ophthalmology clinic in the period 1906–08. From 1920 he was appointed full professor at the School of Medicine in Zagreb and was the founder and head of the Clinic for Eye Diseases in Zagreb (1923–51). His primary interest were trachoma and inserted blennorrhoea.

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Somewhat also confirmed by the studio Foto Tonka Zagreb, who at the time used precisely this photographic shape.

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West-Pavlov, *Space in Theory: Kristeva, Foucault, Deleuze*, 116.

28

Cartwright, Sturken, *Practices of Looking: An Introduction to Visual Culture*, 3.

29

The lecture room had one hundred and fifty seats.

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The Eye Clinic, however, shared the lecture room with the Neurology Clinic, so the teaching aids of both were displayed.

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West-Pavlov, *Space in Theory. Kristeva, Foucault, Deleuze*, 147.

This is also evident in the design of Botteri's photo album and in the selection and order of the displayed photos. It is no coincidence, for example, that the view of the interior of the Clinic begins with a presentation of the lecture room, a space which symbolises one of the three basic tasks of the Clinic. The lecture hall is an unavoidable element which underlines the affiliation of the Clinic to the system of higher education, in this case the newly established School of Medicine. In accordance with the zeitgeist, it comprised semicircular rows of seats for students,²⁹ the imaging apparatus for macro projection and micro projection of histological specimens, panels with illustrations of brain cross-sections, brain pathways, eye cross-sections, ciliary body, etc.³⁰ The abundance of teaching aids suggests intense work with students and modern didactic approaches, within which the professors insisted on the visual aspects of presenting the material. The aids for teaching neurology (cross-sections of the brain) and those used in teaching ophthalmology (cross-section of the eye) are easy to recognise according to the cross-sectional representations of the organs prominently displayed on the front wall,

The next serial of photographs, seven of them, refers to the visual representation of individual departmental components of the Eye Clinic. Firstly, we can see the outpatient clinic (ambulatory) for the initial examination of patients with standardised furniture (a round chair, white Thonet ambulatory chairs with backrests made of bent wood—widely used at the time— a practical desk for the chief physician with instruments and medicines, cabinets, glazed cupboards with a desk, a storage container for used instruments, a hand washing corner with towels and mirror). The space is wide and bright, and due to quality natural illumination it was also suitable for testing vision in daylight, let alone for photographic shooting. The following photo shows a three-table vision examination room with boxes for the glass. This was where focal examination and ophthalmoscopy were performed, in order for the doctor to gain a better insight into various eye diseases. It was possible to admit six patients at a time due to a special lighting system and double-projection mirrors. There were also refraction correction boards in the room. The large dark room was used for examining the outpatients' and clinical patients' ocular medical history and to perform ophthalmoscopic training for students. The small dark room shown next was used for storing a series of ophthalmic devices. It was a time when both doctors and patients believed the power of medical science was indisputable, as it was based on technical advancements, as well as laboratory and other diagnostic possibilities of the period. Finally, it is precisely this powerful representation of space which, according to Foucault, formed the basis for various ways of practising power.³¹ At the time of recording, it was certainly the pride of the Clinic, which is confirmed by the text written by the clinical assistant Andrija Car: "The Eye Clinic is simply proud of this apparatus, because in this respect it does not lag behind any other modern institute of the same kind... Among them is the Nagel anomaloscope for a more precise examination of colour blindness; the Foerster photometer; the



Fig. 3 The vision examination room. Division for the History of Medical Sciences, Croatian Academy of Sciences and Arts. / Sl. 3 Soba za pregled vida. Odsjek za povijest medicinskih znanosti HAZU.

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PROMATRATI VIDENO | OBSERVING THE SEEN



Fig. 4 Small dark room with diagnostic instruments. Division for the History of Medical Sciences, Croatian Academy of Sciences and Arts. / Sl. 4 Mala tamna soba s dijagnostičkim instrumentima. Odsjek za povijest medicinskih znanosti HAZU.
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Hirschberg sideroscope; the Zeiss red light-free lamp with a hard filter; Schwarz's red light-free lamp with a liquid filter (it has a slight advantage over the Zeiss, which is mounted on a very flexible apparatus, and can be handled with an ophthalmoscope as with ordinary lamps); the Zeiss parallax refractometer (it can be very easily used as an ophthalmoscope with a small modification, and is of great importance for beginners in ophthalmology, suitable for working with students in demonstrating changes in the fundus); the Gullstrand slit lamp with corneal microscope according to Czapski (this microscope has three lenses and four eyepieces); a Zeiss microscope for observing the deep parts of the eye; complete large ophthalmoscope without the Gullstrand reflex (quite often we use this ophthalmoscope for the purpose of stereoscopic observation of changes in the fundus, which guides us really well with regard to the depressions and prominences on the background of the eye); the Pulfrich refractometer; Koeppel's ultraviolet eye treatment apparatus; the Norden fundus photography camera; an amblyoscope from Wurach; the Sachs lamp for diaphanoscopy; the Lange diaphanoscopy lamp; the Schwarz double-image test lamp; the large Zeiss spherometer; a small arc lamp for Gullstrand's slit lamp (it has the advantage of increasing the brightness 20 times, thus allowing the tracking of changes in the front part of the eye) and an illuminated perimeter".³³ Equipping the Clinic with this state-of-the-art medical apparatus became proof of its competence, and in accordance with the above textual description, *its articulation in the understandable language of "positive science"*.³³ The space of the Clinic, and the rooms which Car described as its components, was arranged according to the practices which required this, befitting the knowledge, technology, system and organisation of the Clinic, that is, in alignment with everything which defined this institution a clinic. These practices are captured and remain fixed in the time when the photographs were taken and are, as time goes by, increasingly more difficult to translate into modern medical reference and language system. Therefore, Car's article on the organization of the Clinic from that time is a valuable addition to the visual representation and the preserved collection of photographs of the Zagreb Eye Clinic. As a whole, the text and the photos agree with one another, providing a good starting point for new research. A photograph of the small dark room with its archaic appearance and, from a contemporary perspective, outdated apparatus seems like a romantic scenario of former diagnostic possibilities, or like a museum display. Yet, in the context of the development of medicine, it is precisely this space which becomes the historical point that erases the former classical medicine, with its new approach to diagnosis and treatment, based on technology, delivering faster and more objective results.

The photograph of the surgery department which included an aseptic and septic operating theatres, a sterilisation device, an electromagnet and an electrosurgery unit is somewhat more recognisable from the contemporary point of view. In the aseptic operating room there was a table with an

32 Car, "Osnutak, uređaj i organizacija oftalmološke klinike u Zagrebu".

33 Foucault, *Rađanje klinike*, 18.

34 Car, "Osnutak, uređaj i organizacija oftalmološke klinike u Zagrebu".

35 Marinković, Ristić, "Foucaultova geo-epistemologija: geografija, prostori, mjesta".

36 Foucault, *Rađanje klinike*, 219.

37 West-Pavlov, *Space in Theory. Kristeva, Foucault, Deleuze.*, 156.

38 Blair, "A Change in the Units: Middlemarch, G. H. Lewes, and Rudolf Virchow".

39 Fatović-Ferenčić, "Razvoj laboratorija u Hrvatskoj do polovine 20. stoljeća".

40 Stanić, Pandžić, "Prostor u djelu Michela Foucaulta".

oil pump for lifting and lowering the table, and a dry electric steriliser.³⁴ This space was made ready for surgery and still it is shown without staff and patients. But not for long; this changes as we turn a new page of the album. According to Marinković and Ristić, the Clinic “is a space governed by the view of human bodies; of the disease; a space of the supervision of the body which transforms into knowledge and medical practice; it is space / a view; space / a language; space / death”.³⁵ The only photograph from the legacy which differs from the others regarding its content, in that it includes a human presence, shows physicians leaning over a patient’s body, and it is a compelling representation of the aforementioned clinical dramaturgy. There are six doctors in the photo, two nuns and one instrumentalist nurse, shown working around the operating table. The recognisable person in the photo is Dr Albert Botteri, the founder and head of the Clinic, in the company of four other full-time doctors (four assisting doctors). The uniforms of the doctors and the other staff are whiter than the light which penetrates the hall and they blend with the overwhelming brightness of the bedspread. The medical staff overpower both the light and the space, and the reflection of light and their uniforms makes them appear almost transcendental. They represent a new medical world view in which disease “comes to light, is enlightened and abolished like the night in the depth of the visibly reliable and closed but still accessible space of the human body.”.³⁶ At the same time, beneath the white cover lies a completely motionless and barely visible patient. The modern clinic is based on the principles of elaborated spatial distribution, which becomes a therapeutic tool. The new regime of space produces a new view on medicine, that inherent in the clinic, which produces a new form of patient.³⁷ Furthermore, after moving away from Morgagni’s interpretation of the disease, which according to this scholar occurred in the organs, Virchow’s cellular pathology (*Omnis cellula e cellula*) abolished Hippocrates’ humoral doctrine. Its imperative, among other things, was to observe the patient as a whole. Virchow and his followers, such as Herbert Spencer, advocate a democratic model of the body where cells are a vital and revitalising element, and the cellular structure of the organism is consistent with that of the level of society, and just like society, it constantly strives towards hierarchy.³⁸ Cellular theory provided an innovative view of the parts and the whole on the level of science / medicine and on the level of society. Further strengthened by etiological research within the development of biochemistry, microbiology and immunology, medicine introduced and institutionalised a laboratory centre which became every clinic’s indispensable diagnostic and research centre.³⁹ The focus of medical observation is the pathological substrate, its source and treatment options, with a holistic view reduced to the specialist expertise of a particular organ system. In order to understand the disease, a doctor must abstract the patient from what he is suffering from, thus making him a separate entity, an external fact.⁴⁰ The physician focuses on the pathological substrate; it is the starting point of clinical assessment which yields a conclusion and a piece of specific knowledge crucial for the medical practice.



Fig. 5 Teaching eye models. Division for the History of Medical Sciences, Croatian Academy of Sciences and Arts. / Sl. 5 Učila. Odsjek za povijest medicinskih znanosti HAZU.

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Fig. 6 Albert Botteri with his team during operation. Division for the History of Medical Sciences, Croatian Academy of Sciences and Arts. / Sl. 6 Albert Botteri sa suradnicima za vrijeme operacije. Odsjek za povijest medicinskih znanosti HAZU.

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Some of the photographed spaces are recognisable to non-experts (lecture room, library, operating room), while the function of others, especially those populated with equipment, can be fathomed only by those with medical knowledge and the knowledge of the development of the ophthalmological profession. From one photo to another, it is clear that this is a display of the *excellence* of the newly established Clinic, not only due to the space in which it is located, the equipment and the instruments in its possession, but also due to its specialist orientation and the knowledge it generates. The expertise of the Eye Clinic was defined by specialisation and sub-specialisation, orientation towards a certain organ in accordance with the developmental achievements of medicine of that time. The Clinic offered a new and different experience of the medical practice, a fragmented focus on parts of the organism, the art of uniting them in clinical interpretation and articulation, which the photographs symbolically reveal.

The inpatient part of the Clinic had twelve patient rooms. There is a photo of one of them, also devoid of patients, with carefully stacked beds arranged in two rows. The album also includes a photograph of the library which, although also empty, underlines the Clinic's role in scientific research.

All but one of the photographs of the Clinic are deprived of people. Empty spaces are the opposite of everyday hospital life and the fact that such places are in reality brimming with people. The content of the photographs therefore raises questions: were these photographs taken before the Clinic officially opened its doors to patients, that is in early 1923, or was the Clinic made to look empty for the purposes of photographing? Were the accents of power placed so as to focus on the equipment rather than people, assuming the objectivity of assessment through the introduction of technology in the health system?

Each photograph from the album tells its own story, but is also a part of the full narrative, thus confirming the operating system of this institution as a workplace which stems out of the identity of the newly established School of Medicine and its academic and generally social role. Furthermore, the medical space overlaps with the social one. According to Stanić and Pandžić, the connection between society, space and disease is obvious in the specialisation of disease, which becomes isolated in society, and divided into areas and places of healing,⁴¹ which is then reflected in the organisation and work of the Clinic.

Unlike other clinics, whose early photographs were mostly taken by amateurs, the visual representation of the Eye Clinic was entrusted to a professional, the well-known Zagreb photo studio *Foto Tonka*, run by Antonija Kulčar. Surely, Botteri wanted to present his eye clinic to the public, which was also the first eye clinic in the region at the time, as a well-known institution of focused and organised

functionality and specialisation, but also as a reflection of his competence and state-of-the-art equipment, so to stand alongside similar European institutions.

Foto Tonka was known for taking pictures of various aspects of life in Zagreb, and in the period between the two wars, according to Lovorka Magaš Bilandžić, its owner *enjoyed the status of a master craftswoman and an excellent artist.... Her studio was among the leading photographic studios in the Kingdom of SCS / Yugoslavia, and she was one of the main chroniclers of social, cultural and theatrical life and a prominent portraitist of the citizens who held the title of the royal court photographer.*⁴² The exhibition held in Klovičevi dvori in 2015 entitled *Foto Tonka. The secrets of a social chronicler's studio* offered a visual chronicle of Zagreb through the medium of photography, showing primarily the world of fashion and urban glamour, describing the bustling life of Zagreb's citizens, which did not much differ from any other city centre. In this context, the preserved photographs of the Eye Clinic, which have been kept away from the public for decades, with their lack of people and their technological coldness, form a kind of an antipode to the lush, playful life which usually emerged from Foto Tonka, and was as such shown in the exhibition. Almost paradoxically, this visual records of this eye care facility remained out of the public eye, although it is possible that many Foto Tonka's clients in fact sought medical help there.

Unfortunately, even within Croatian medical historiography, especially when it comes to the development of health care institutions, the use of photographs as a starting point in the analysis is not common. This is partly due to the fact that a lot of the medical photographic heritage has been destroyed. What remains preserved in various institutions usually lacks recorded information, and such material is often useless in terms of comprehensive analysis and publication. This, of course, impoverishes a good part of the memory of professional development. For example, medical memorials, even those dedicated to the anniversaries of the School of Medicine, rarely use this kind of visual material, even when it comes to the historiography of the Eye Clinic.⁴³ We can assume that when it was relocated to the University Hospital Centre Rebro, a part of the photographic archives were discarded. Nevertheless, due to several diligent and conscious individuals with a sense for cultural heritage, a part of this legacy was rescued and is today the focus of our analysis.*

41 Stanić, Pandžić, "Prostor u djelu Michela Foucaulta".

42 Magaš Bilandžić, "Tonka u fokusu. Vizualna kronika kroz medij fotografije", 7.

43 For example, although it describes its early organisation in Kukovičeva Street, the latest monograph of the School of Medicine published for the occasion of its 100th anniversary in the chapter on the development of the Eye Clinic does not include any photographs from that period. It is similar with other university memorials. Compare: Department of ophthalmology and optometry. In: Pećina, Klarica, ed. *School of Medicine, University of Zagreb 1917–2017*, 633–637.

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