

The making of historical bodies: sex, race, and type in the beginnings of the Romanian physical anthropology

Alexandra ION*

Abstract: Human remains are a particular type of archaeological resource, the material evidence of past individuals. From its beginnings, archaeology and osteoarchaeology seemed to have divided their understanding of the human body and focus of study: while the first was interested in the social and historical dimension of the body, the latter focused on the body-as-biological organism. However, in this process even the notion of the „biological” body is not that clear cut and stable, and the case of the early Romanian anthropology is a relevant example. The goal of this presentation is to explore the meanings that the osteoarchaeological body took in this particular context. Starting from Francisc I. Rainer’s (the founder of the Institute of Anthropology in Bucharest) research on a Paleolithic human skull, along his observations on archaeological artefacts and populations, I intend to highlight the way in which the link between archaeology and biology/anatomy was constructed through the concepts of race, genetics, functional anatomy and evolution. In his view, the body appeared as a historical entity, the locus for understanding human variability, with its different parts being considered as diagnostic elements for studying the history of humanity.

Rezumat: Osemintele umane reprezintă un anumit tip de resurse arheologice, urme materiale ale ființelor din trecut. De la începuturile sale, arheologia și osteoarheologia par a-și fi împărțit înțelegerea corpului uman ca obiectul de studiu: în timp ce prima disciplină a fost interesată de dimensiunea socială și istorică a corpului, cea din urmă s-a concentrat asupra organismului-corp-biologic. Cu toate acestea, în acest proces, chiar noțiunea de corp „biologic” nu este atât de clar definită și stabilă, iar începuturile antropologiei fizice românești reprezintă un exemplu relevant. Astfel, scopul acestui studiu este acela de a explora sensurile pe care corpul antropologic l-a dobândit în acest context particular. Pornind de la analiza unui craniu paleolitic de către Francisc I. Rainer (fondatorul Institutului de Antropologie din București), am de gând să evidențiez modul în care a fost construit legătura dintre arheologie și biologie / anatomie, prin intermediul conceptelor de rasă, genetică, anatomie funcțională și evoluție. În concepția lui Rainer, corpul a fost definit ca o entitate istorică, locul de înțelegere a variabilității umane, iar fragmentele diferite devenind elemente de diagnostic pentru studierea devenirii umanității.

Keywords: Francisc I. Rainer, physical anthropology, Romania, skull, race.

Cuvinte cheie: Francisc I. Rainer, antropologie fizică, România, craniu, rasă.

◆ The elusive materiality of the archaeological body

Human remains are a particular type of archaeological resource, “provocative through their materiality” (J. Sofaer 2006, p. xiii), the evidence of past individuals. As highlighted by K. Verdery (1999, p. 27), they are “indisputably there, as our senses of sight, touch, and smell can confirm”. In most cases, osteoarchaeologists are dealing with bones (rarely and especially in forensic cases retaining also hair/tissue/skin fragments). The bone’s durability makes it prone to be a rather common presence in the archaeological record, so archaeologists have been trying to use them as part of the interpretative process of establishing a link with the traces of the past.

But how is the human body approached and understood in this process of interpretation? As noted by D. Bori and J. Robb (2008, p. 1), the body has not been a main topic of interest in archaeology for a long time, and when this happened its understanding was divided between the discipline of funerary archaeology and that of physical anthropology, later osteoarchaeology¹. One can

* University of Bucharest, Bd. M. Kogălniceanu 36-46, 050107, Bucharest, Romania / “Francisc I. Rainer” Institute of Anthropology, Cultural Anthropology Department, e-mail ialex20@yahoo.com.

¹ In the present day, the analysis of the Paleolithic skull which represents the case study presented in this article would be designated as an osteoarchaeological or paleoanthropological analysis. However, during the first half of the 20th century in Romanian academia, there was no such distinction, and the term “anthropology” was employed. In the same time, Francisc Rainer’s understanding of “anthropology” is more in line with what we might define as physical anthropology, while the cultural aspects would have been reserved to the science of archaeology or ethnography.

observe that the two disciplines seem to have divided their understanding of the human body and focus of study: while the first is interested in the social and historical dimension of the body, the latter focuses on the body-as-biological organism. In their paper, A.E. Rautman and L.E. Talalay (2000, p. 2) highlight these two different meanings that the body took in archaeology, with some studies focused on the "physical or skeletal components that define the human species...seen as an archive of ancient diet, state of health, life span, physical activity" and those studies that address the body in terms of how "cultural ideas" are made manifest. Hence, the body has been defined either as a "fossilized rest of the natural world" of interest to physical anthropology, or it has been treated as another category of archaeological material that often remains the backdrop for the analysis of funeral inventory, or funeral practices (L.N. Stutz 2008).

In addition, the biological data provided by physical anthropology (sex, age, pathologies) have been used to fill in the details of the larger archaeological narratives, and to quote J. Sofaer (2006, p. 2) "once sex or age has been determined, the body no longer seems of interest to archaeology". This created a tension between the two seemingly parallel views on the body: a "natural" and a cultural one. J. Sofaer (2006) analysis extensively the history of these two approaches². The first, operating in the tradition of an empirical investigation, is based on the positivist methods of inquiry taken from the natural sciences. The human body (the bones) is measured, broken down and analyzed to obtain data related to diet, lifestyle, anthropometric characters, demographics, individual variation. The principles and interpretative models are based on the findings and methods taken from biology, bio-mechanics, anatomy, genetics or chemistry. In line with such studies, the body appears as an historical entity (J. Sofaer 2006, p. 51), an organism seen as universal and apriori. The terms in which such a body is described are: sex, age, pathology, trauma, life expectancy, occupational markers etc. Thus, for physical anthropologists, the understanding of a past individual starts through the window of this type of materiality - their biological makeup becomes the focus of study. This is how the illusion of a durable nature of the human body and materiality of humanity was built, a perspective which has been strongly criticised in the recent post-modern literature. As J. Butler commented, "materialization is something which happens, rather than something which simply is" (apud J. Thomas 2002, p. 33). Therefore, it is not a matter of being a man/woman, or young/old, but of performing the body in a certain way.

On the other hand, for most of the funerary archaeology studies, the body is interesting just as the subject of funerary practices, usually being analysed in terms of placement, position, treatment of the body, disposal methods (J. Sofaer 2006, p. 12). What matters in these instances are the cultural practices and beliefs, and less the particular individual. In recent years, under the influence of cultural anthropology, gender or philosophical studies, there have been some attempts to move beyond this dichotomy, and to focus on an archaeology of the body or of embodiment, where the body appears as "an experiential location" (J. Sofaer 2006, p. 21), or as a specific cultural and historical construct, varying with time (Y. Hamilakis et alii 2002; L. Meskell, R. Joyce 2003; A.E. Rautman 2000). The concepts which have been employed in relation to the body in these contexts are: "gender", "performance", "embodiment", "agency".

Even so, most of the archaeological and anthropological literature seems to find it difficult to bypass the divide between the biologic, "natural" body, and the body as experienced in cultural practices, and one reason is due to the theoretical foundations of the disciplines: the embracing of humanism, the belief that "the character of humanity is fixed and knowable" and man is made up of different layers, a biological body to which mind, soul etc. has been added (J. Thomas 2002, p. 30). Thus, the body has been seen as a "neutral template through which people live" (C. Fowler 2002, p. 47), of a seemingly universal nature and made up of the material substances which can be known through empirical questioning. This is a historically constructed model, the result of the "culture of dissecting" and anatomical inquiry from the Renaissance period onwards and of a Cartesian view of knowledge. It led to a certain view on the human body in the western world - the culture of dissecting determined the construction of an anatomical body, structured around the skeleton. As E. Hallam (2010, p. 474) resumes, "anatomical practices, descriptions and images made bones distinct and vivid, materially discernible, whilst also placing them in necessary relations with other organs" (see E. Hallam 2010 for an analysis). Therefore, an individual becomes a stable self, contained in a knowable body, and the whole discipline of physical anthropology is built on the premise that an investigation in this material makeup is a way of understanding human variability.

² However, the relationship between the two disciplines varied throughout history, depending on the theoretical approach employed.

However, even in the physical anthropological studies the notion of the “biological” body is not that clear cut and stable. Recent studies have tried to explore this issue, by looking at the impact of bodies’ materiality on scientists (C. Krmpotich et alii 2010; J. Sofaer 2012), or at the way in which materiality is constructed and performed as part of the anthropological analysis (E. Hallam 2010; A. Ion 2011). In this article I intend to take the argument even further and show how a specific body was defined in the physical anthropological literature, and the case of the early Romanian science is a relevant example. Thus, it is my goal to explore the meanings the osteoarchaeological body took in this particular context, to analyse the structuring of the discourse in which the human body was produced (to use M. Foucault’s terms), in order to understand the different layers of meaning highlighted. Starting from F.I. Rainer’s (the founder of the Institute of Anthropology in Bucharest) research on a Paleolithic human skull, along his observations on archaeological artefacts and populations, I intend to highlight the way in which the link between archaeology and biology/anatomy was constructed through the concepts of race, genetics, functional anatomy and evolution. Thus, for him the body appeared as a historical entity, and the locus for understanding human variability, with different parts being considered as relevant for anthropological research- diagnostic elements for studying the history of humanity.

◆ A Paleolithic human skull

In order to understand how variability was defined and framed in the history of Romanian physical anthropology, we shall start from the specific case of one of the first academic studies.

In 1942, the anatomist and doctor F.I. Rainer (1874-1944), the founder and Director of the Institute of Anthropology in Bucharest, published the first article about a Palaeolithic skull (F. Rainer, I. Simionescu 1942). Starting from his activity and experience as dissector and medical teacher at the University of Ia i (1913-1920) and then at the University of Bucharest (1920-1941), he had developed an interest in searching for human variability and its transformation with time. He had started handling, preparing and archiving human specimens as laboratory assistant at the Colțea Hospital (Bucharest) and then, as Director of the Institute of Anatomy of the Faculty of Medicine and of the Institute of Anthropology he gathered an entire archive of human remains. In over 40 years of research he collected skulls, body parts, tissue samples, death masks, anthropological photographs and notes taken during the campaigns led by the sociologist D. Gusti, as well as annotated anatomical drawings, statues, autopsies and criminals’ photographs³. But what were the theoretical elements which linked all this elements and how was his anthropological gaze constructed?

The topic of the article he wrote in 1942 was a Palaeolithic skull discovered at Cioclovina, the second human fossil found in Romania (fig. 1). After an introduction that recounts the discovery location and the geological and archaeological context (with the associated archaeological material), F.I. Rainer devotes the second part of the article to the description of the skull (F. Rainer, I. Simionescu 1942, p. 493-503). This description followed several characteristics: age (30-40 years), sex (possibly female), type (*Homo sapiens diluvialis*). Based on the skull’s shape and measurements, the individual had been assigned to the *Homo sapiens diluvialis* type; as F.I. Rainer described it, the supraorbital region of the skull recalled the *Homo Neanderthal*, but there was no torus present.

Then the analysis broke the body down into morphologically significant fragments. These fragments, such as the “supraorbital torus”, “glabellar depression”, “supra orbital triangle”, “calvary” became typologically diagnostic elements, the basis of comparison with the skulls discovered at Neanderthal and Predmost, the other two sites where Palaeolithic human remains had been discovered- and any observed differences constituted the basis for identifying a new type of human. The morphologic affinities with the other skulls discovered at Neanderthal and Predmost were proven through the superposition of the skulls’ horizontal contours, and the differences were interpreted in evolutionary terms - the decrease of primitive traits. The median curve created a group between the four skulls from Predmost and this one. The absence of the frontal sinus in the Cioclovina individual was interpreted as a sign of individual variation.

Moreover, the skull was transformed into a series of indices, figures, measurements, which turned it in a series of mathematical relationships that could be compared. The terminology used to

³ He also analysed several roman skulls discovered by Prof. Brcil at Turnu Severin and he collected other specimens (M. Sevastos 1946, p. 72; see fig. 8).

describe and analyse the body was: curve, contour, horizontal, vertical, median, arch length, chart, sagittal, frontal / parietal / occipital suture, indices, distance, variant (figs. 2-3).



Fig. 1. Scanned image showing the Cioclovina skull (after F. Rainer, I. Simionescu 1942).
Imagine scanat a craniului de la Cioclovina (dup F. Rainer, I. Simionescu 1942)

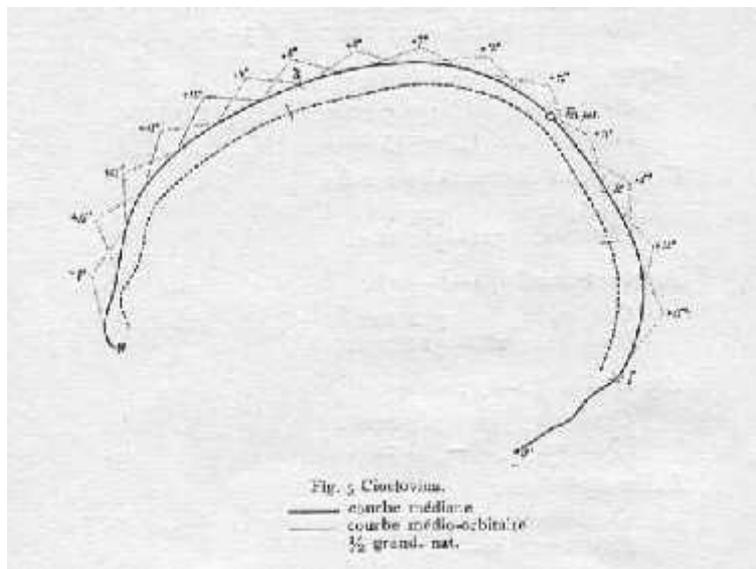


Fig. 2. Scanned image showing the Cioclovina skull (after F. Rainer, I. Simionescu 1942).
Desen scanat al craniului de la Cioclovina (dup F. Rainer, I. Simionescu 1942).

◆ Constructing bodies in the beginnings of the Romanian anthropology

Thus, the first question raised by this analysis is what had determined the construction of such a perspective? In order to better understand the slowly coming into being of this anthropological gaze, one needs to look at the broader theoretical context in which F.I. Rainer constructed his method.

establishing constitutional types⁵ (.M. Milcu 1954, p. 9). Regarding the study of archaeological specimens there is just the contribution of M.G. Obedenaru (1839–1885), who presented in 1874 his analysis of 3 skulls to the Société d'Anthropologie de Paris, one being ascribed to the "dacian" type (M. Turda 2010, p. 5).

The majority of these studies were racial studies, considerations on the biological makeup of the diverse ethnicities on the territory of Romania: in 1919 and 1927 E. Pittard published two such studies ("Recherches anthropologiques sur les Roumains de Transylvanie" and "Etude sur l'indice cephalique en Roumanie"), the sociologist and anthropologist I. Chelcea (1902–1991) published in 1935 "Tipuri de craniile românești din Ardeal (Cercetare antropologic)" [Types of Romanian crania from Ardeal. Anthropologic research], Petru Râmneanțu (together with P. David) "Cercetări asupra originii etnice a populației din sud-estul Transilvaniei pe baza compoziției serologice a sângelui" [Research on the ethnic origin of the population from the southeastern Transylvania based on the serological composition of the blood], and the anatomist V. Papilian also published two studies on the Transylvanian ethnic groups" (Studiul indicelui cranian vertical și transverso-vertical pe craniile de români și maghiari" [The study of the vertical cranial indices and transverse-vertical indices on the Romanians and Magyars crania], and "Cercetări antropologice asupra românilor ardeleni" [Anthropological research on the Romanians from Transylvania]) (M. Turda 2006, p. 419-420; 2010, p. 7). At first limited to craniological studies, followed by serologic and morphologic ones, these researchers were trying to record the height and cephalic index of the population, and to establish the racial characteristics of Romanians and of other ethnic groups living in the country. There are a number of contemporary studies that have reviewed the foundations and the theoretical premises of these works (M. Bucur 2005; M. Turda 2006, 2007a, 2007b, 2008), highlighting the intrinsic link between the assertion of the national state, the development of anthropological theories and even some eugenic ideas (as was the commission established in 1943 "to defend the biological capital of the nation, close to the Antonescu government ... proposed to establish an Institute of ethn racial biology ... to determine the biological value of people") (.M. Milcu 1954, p. 18).

The growing interest in the anthropological perspective was also marked by a gradual institutionalisation of the discipline, with the establishment of the first research centres or dedicated courses. In 1909 the geographer S. Mehedinti (1869–1962) introduced a class in anthropogeography and ethnography (M. Turda 2010), and the first anthropological departments were founded during the 1930s: a department of anthropology and paleontology at the Faculty of Natural Sciences in Iași (director I.C. Botez, and then O. Necrasov), an Anthropological Society in Cluj (1933), the Demography, Anthropology and Eugenic Section of the Statistics Institute was established by S. Manuil in Bucharest (1935), and given to I. F. C. oaru in 1941 (.M. Milcu 1954; M. Turda 2010). In June 1940, through the efforts of F.I. Rainer the Institute of Anthropology was founded in Bucharest (see A. Ion 2014), with the role of studying from an anthropological point of view the Romanian people. The studies conducted here will focus on craniology, osteology, ancient or contemporary studies of populations, such as the residents of several mountain villages where Rainer undertook a series of field campaigns between 1927 and 1932 (.M. Milcu 1954, p. 17; F.I. Rainer 1937). In these campaigns, F.I. Rainer applied R. Martin's anthropometric methods, 13 measurements on which he calculated 13 indices (.M. Milcu 1954, p. 17). Moreover, from his initiative the seventeenth edition of the International Congress of Anthropology and Prehistoric Archaeology was hosted in Bucharest in 1937. In 1942 was held the first course in anthropology at the University of Bucharest, taught by F.I. Rainer. But for a long enough period of time, the anthropological studies focused on contemporary populations and less on archaeological materials, exception being the study of Cioclovina Paleolithic skull⁶ (F. Rainer, I. Simionescu 1942), an analysis of a Scythian skull (A. Donici) and of some remains from the Bronze Age (.M. Milcu 1954).

⁵ He wrote that "the functioning of this glands...we believe that they will explain one day the differences between individuals...They play an important role...in the formation of the physiological personality and therefore the psychological personality of the individual" (.M. Milcu 1954, p. 9).

⁶ F.I. Rainer was familiar and interested in the archaeological discoveries of human fossils. In his diary, he notes in September 1911 about his trip to Dresda: "this morning we visited the prehistoric and ethnographic collection. There are also some very interesting casts executed by a company from Bonn. The most beautiful is the reproduction of the skeleton from Aurignac, exactly in the attitude that it had been found in the sand of the cave. It would be a nice acquisition for the Antipa museum... there is no reproduction of the remains found at Krapina in Croatia. Though I read that nowadays it is believed that at Krapina, where they also found skeletons fragments of the more primitive (from Moustier), which is believed to have appeared in Europe about 40,000 years ago, and

◆ From the “natural” body to the anthropological body

By studying F.I. Rainer’s journal, his notes, classes and conferences, one can observe how the anthropological body was built around three key terms: form, type, race. As I will show in what follows, this body was literally constructed by a series of scientific procedures, through several mediation technologies, each of the three concepts being embedded in a different stage. What resulted was a set of mutable inscriptions (in terms of M. Lynch 1985, 1988).

To start with, similar to other physical anthropologists of the time (R. Martin, R. Virchow), Rainer’s method was an empirical one, focused on collecting facts. His background was that of an anatomist and dissector, therefore his understanding of a human being was through the lens of the direct investigation of the body. He employed an empirical method, through the keen ocular inspection in the material layers of the body and started making connections between the morphologic appearance of this materiality and aspects defining an individual’s identity - pathology, sex, race.

In the same time, he became interested in human variability, identifying the differences between various types⁷. In this line, each body became a case study, illustrative of a wider series: the more cases he could have, the better understanding he could get. For example, in order to prove to his colleagues an unknown disease of the superior vertebral articulations, Rainer brought two crates of documents comprising of 5020 studied cases (S. Dumitrescu, M. Stîrcea-Cr ciun 2000, p. 26). In his own notes he also wrote “the plasticity of the human form is highlighted by a number of observations and one needs to carefully gather as much material as possible” (A. Majuru 2013, p. 217).

To get back to the analysed Paleolithic skull, this underwent a process through which a human body was translated from the “natural domain” into becoming an anthropological object. By following the devised methodology, through several levels of mediation (that of instruments and concepts), it was turned into a series of visual representations, inscriptions and numbers. The resulted representations were not just an annex of the text, but epistemic images, “essential for the way in which the scientific objects and the ordering relationships are revealed and made analyzable” (M. Lynch 1988, p. 201). Based on an inventory of the Institute of Anthropology (Document June 28th 1940) and the analysis presented in the article, one can retrace the steps and instruments involved in constructing the anthropological body.

Thus, the first step in the anthropological analysis addressed form. F.I. Rainer applied the anthropometric methodology as devised by R. Martin (1914), a standardized method for analyzing human bodies. From his journal we know that he refined these methods while visiting R. Martin in 1921; he noted: “he showed me how is best to hold the sliding calipers”, or “this morning I saw the placing of the skull in position for goniometry. Martin explained the problem with the point [...]” (F. Rainer 2012, p. 127). As a result of this trip, he ordered a Th. Mollison anthropometry kit and craniometric forms.

At first, he placed the skull in the horizontal plane, a fixed standardized position which would make the obtained data comparable with other individuals’ similar bones. For this, F.I. Rainer must have used the Martin and Saller cubic craniophor (fig. 4), an instrument for holding and orienting bones. Such an instrument would have “properly orientated, and held in the jaws, within a skeleton cube, so that it presents the six normae and thus may be drawn or photographed in any of them” (H.H. Wilder 1920, p. 20). This instrument, along with the Martin dioptograph, turned the skull from the natural order and placed it in a plane of mathematical coordinates. In the same time, from a three-dimensional object it was transformed in a two-dimensional contour. Furthermore, on this contour, several measurements were taken: through the use of calipers and a goniometer (an instrument used for measuring angles, figs. 5-6), the form was broken down in several landmarks, and the distances between them recorded. This is how the indices, arches and measurements presented in the article were produced.

of the much more intelligent man from Aurignac - would have happened one of the clashes that took place between the two races and the consecutive acts of cannibalism whose traces are visible on the bone” and “But what makes me very happy is that I have also gained some strong notions about the fossil man and the experimental heredity” (F.I. Rainer 1911, Manuscript from the Francisc I. Rainer” archive).

⁷ The element which he deemed the best for studying human variability was the skull or the brain: in one of his classes he mentions that “the brain makes us part of mammals, but also the cortex distinguishes, defines us”, and that the most important factor from an evolution point of view is “not the hand, but the skull, because it is the shelter of the brain. The most important organ. The hand evolved only in relation with the brain. It expresses the evolution of the brain” (.M. Milcu 2006 apud A. Majuru 2013, 216).

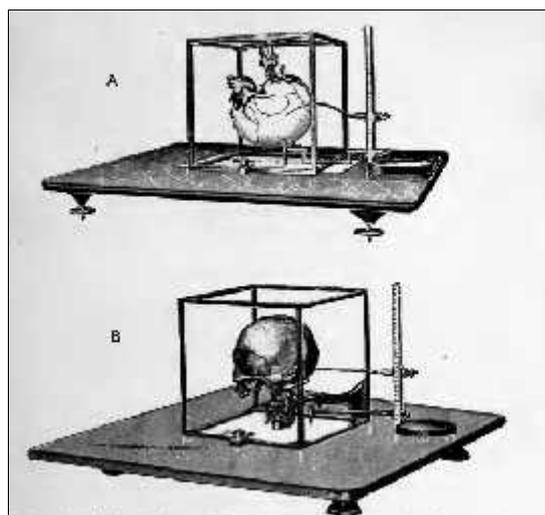


Fig. 4. Cubic craniophore of R. Martin (after H.H. Wilder 1920).
Craniofor cubic Martin, folosit cu diagraf (dup H.H. Wilder 1920)

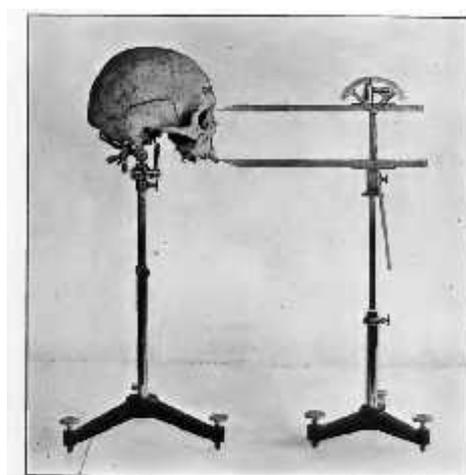


Fig. 5. Stationary goniometer of Martin (after H.H. Wilder 1920).
Goniometru staționar Martin (dup H.H. Wilder 1920).

As a result, he obtained the images presented in the article: photographs, drawings and numbers. In this case, "photography was conceived as a form of measurement that, when carried out under sufficient control, could be transformed into statistical data" (A. Morris-Reich 2012, p. 53). Regarding the drawings, what resulted through such a transcription was an overlay between the natural and mathematical orders. Because what one sees is related to how one sees, these drawings created a particular type of relationship between the different aspects of form that become diagnostic features: curves, angles, certain landmarks, shape. Therefore, what is created is a visual explanation of the human type (*Homo sapiens diluvialis* in this case), and a relationship between this individual's form(s) and the standard norms/measurements, quantified as mathematical properties. Hence, the skull is diagnosed as being: "dolichocranic", "orthocranic", "metriocranic" (F. Rainer, I. Simionescu 1942, p. 498). The qualities chosen to define the thing represented are those related to mathematics, and are translated through two-dimensional lines. In the same time, these images are considered the proof of the correct identification of a human type, and a series of measurements placed in association with them are deemed as being conclusive, proving the homogeneity of the group of the 5 compared human fossils: the length, circumference, and transversal/median arch of the skulls (F. Rainer, I. Simionescu 1942, p. 496).

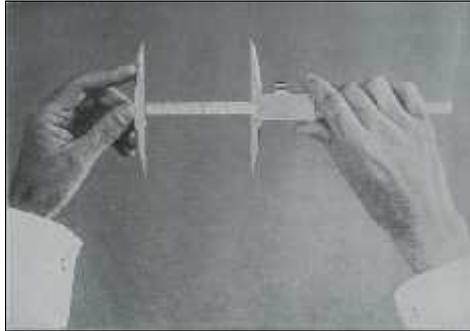


Fig. 6. Martin callipers (after R. Martin 1914 - the copy from among F.I. Rainer's papers).
 ublic R. Martin 1914 - exemplar din arhiva lui F.I. Rainer).

All these procedures were founded on the concept of form as developed by J.W. Goethe (1749-1832). Several quotes of J.W. Goethe from F.I. Rainer's notes or from the three lectures he devoted to the "great man" ("Goethe: the superior man", "Goethe - the man of science" and "Goethe and Science"; F.I. Rainer 2012, p. 237-243) highlight the importance of morphology in his own perspective. J.W. Goethe had proposed a morphological understanding of the organic forms of life, equating form with the ultimate cause, its drive - *Bildungstrieb* (R.H. Brady 1987). Hence, from a static classificatory element as it has been for the human taxonomy of C. Linnaeus, J.W. Goethe focused on the functional properties and development of form, its transformations (R.H. Brady 1987; T. Lenoir 1987). In the same time, he was interested in observing the relationships existing between different parts of the same organism, believing in an ideal universal form, the archetypal form, which is present in any part of an organism. Thus, the elements of the morphotype were to be studied in different organisms in order to establish relationships, which led to the development of comparative anatomy. Therefore, J.W. Goethe's phrase "geprägte Form, die lebend sich entwickelt" ("the framework of the form which being alive develops") translated into F.I. Rainer's motto: "anatomy is the science of the living form".

However, F.I. Rainer took this conception further, and this is illustrated by the second stage of the anthropological process: the creation of a series of drawings, in which the Cioclovina skull was superposed with other fossil human skulls. Through this, F.I. Rainer tried to establish a type, by comparing several specimens. For F.I. Rainer the organisms were historical beings, "successive forms with successive variants" (F.I. Rainer 1942). He was not merely interested in form, like J.W. Goethe, but also in how this structured itself, being influenced by the works in developmental mechanics of E. Wiedersheim and by the studies of W. Roux⁸ in functional anatomy ("*Substanța vie*" 1944, F.I. Rainer 2012, p. 280): "the living form is closely connected with structure and this with function; it is thus the expression of the functional structure" (O. VI du iu, apud M. Sevastos 1946, p. 49). In the same time, he moved away from the idea of a universal, ideal "type" under the influence of Darwinian theory and the laws of experimental heredity proposed by G. Mendel. Thus, morphology becomes understood as the result of a long evolution, the way in which the internal medium (the genotype) responded to the external factors, "the potentialities versus what is actually enacted". Therefore, he interpreted the morphological aspects of the Cioclovina skull in a causal key, the anatomical configuration being defined as the result of external adaptations- a specific phenotype. As F.I. Rainer would write, "the individuality of each of us is an evolutive element" (A. Majuru 2013, p. 216). In this line, human variability becomes the key element which needs to be investigated in order to understand what he called "The biological phenomena HUMAN".

As a consequence, he also compared the drawings of the skull with four other Neanderthal individuals from Predmost and Krapina. Between shapes, landmarks and individuals were established morphological relationships, interpreted as temporal dynamics: succession, simultaneity, proximity, so that the anthropologist can group and build a narrative regarding the evolution of men. Finally, what he obtained was a standardized "map" of these relationships, a series of static relationships. In this case, it was the Homo type (see fig. 7 for similar perspectives).

⁸ Who supported the idea that "any living organisms executes the specific fundamental functions of life (preserving, growing, reproduction and development)" (F.I. Rainer 2012, p. 280; see also V. Toma 2010).

Lastly, the all encompassing concept under which he placed the study of the variability of historical beings was "race". Race had been an important classificatory concept in the anthropological studies of the late 19th - early 20th century. There were many understandings of race, but in general it "was thought to represent a natural category with unique features that defined the essence of that category" (R. Caspari 2003, p. 66). This was a concept borrowed from the natural sciences where it designated a subdivide of species. In F.I. Rainer's view⁹, race was used as the concept which explained the visible different morphological traits, the manifestation of genetic aspects in different environmental conditions: as he would write, "der Wesen der Rasse liegt in der Erbmasse" (the essence of race lies in heredity). In this line, anthropology became the science which "deals with the hereditary distinctions between people" (F.I. Rainer 1942), and it could only develop "by focusing on the racial anthropological studies, which creates the materialistic basis of any science about man. They need to be interpreted in their historical evolution, as processes of becoming" (A. Majuru 2013, p. 217).

This particular anthropological understanding is revealed in the text on the Cioclovina skull, in which the biological body is seen as a historical body. As we can read from F.I. Rainer's notes, he talked explicitly about "evolution variable in human form" and "the historical variability of the primate type" (F. Rainer 1942). What he did was to take the concepts developed in biology and to move the focus on history – the body as a historical artifact. Therefore, he incorporated archaeology, paleoanthropology and geological data in his anthropological method, in order to explore the historical dimension of humanity. In his lessons from 1942, designed to reveal the organisation of the living form, he talked about: "the identity of the construction plan in vertebrates and especially in mammals", "the historical variability of the mammal organisation", where did humanity appear, the factors of mutations, ambiance versus heredity, as well as the use of images showing "the human ovum and sperm/the alogenic map of the tertiary old world, images with twins placentas, of flowers, of monkey embryos, of glaciers and the Herder charts of the human cultures, and the evolution of the anthropus-homo sapiens" (Homo faber, homo sapiens, anthropos phase, sapiens fossilis phase) (F.I. Rainer 1942). In another course, human variability was to be studied through the topics of "phenogenesis, vitamin and hormone theory, neurologic individual theory - Riese Goldstein, physiologic hereditary theory, human types: sexual, constitutional, racial types", with the first lesson on: the factors of mutations "segregation, climate, soil, vitamins, hormones", "human typology-to what degree they are the result of the hormones and vitamins", or "sexual types- lesson designed to be illustrated through images of experimental and human monsters" (F.I. Rainer 1943).

◆ Conclusion

The purpose of this article was to explore how the anthropological understanding of the body was created in the beginnings of the Romanian discipline. In the same time, this study highlighted that even though the body, as it appears in the analyses of physical anthropologists, seems to be a natural and universal one, this is not the case. As the article on the Cioclovina skull showed, even the "biological" body can be defined through various concepts – in this case, form, type and race-, and certain aspects of it to be brought into view and made available through mediation technologies.

In this case, what F.I. Rainer did was to define humanity in terms of abstract and mathematical relationships, addressing form, as a morphological variety that has a functional determination. In this line, anthropology became the science of form, the past and otherness became morphological varieties, whose identity lied in the material. The aim was to find the links in the evolution of the human species as he imagined it. Thus, humanity appears as a sum of morphological variations, while culture is only a superstructure: "any idea of life derived from biology is sub-human,

⁹ We can see how F.I. Rainer describes the traits defining a race in his "problem of human races" conference from 1934 (F.I. Rainer 2012, p. 190): "the egyptian people: middle stature, a little above the mean, elongated head, elongated face, curly, dark and never wooly hair, the forehead a little over the eyes, big eyes. The angle from the inside of the eye is rounder than the exterior one. The lips are a little too full...the chin is thick and square...a particularity of proportion. The forearms are proportional, longer than the arms and the legs are longer than the thighs". In the same time, in contrast to other of his contemporary colleagues, he did not believe in pure races- every individual is a mix of races. Among the races he mentioned are the: "Mediterranean, oriental races, the negroid and the armenoid elements" (F. Rainer 2012, p. 190). Thus, he distanced himself from the eugenics movement - in his 1943 class notes he explicitly mentions his disapproval of the work of the eugenics Al. Carrel (1873 –1944).

but no idea of life should conflict with biology" (F.I. Rainer apud .M. Milcu et alii 1947, p. 15) and "today, general biology is the wellspring that can rise us above the level of everyday life" (F.I. Rainer 2012, p. 78). Therefore, he thought about people in terms of categories, of sexual types, constitutional types, and racial types. Such a perspective leaves no room for agency or subjectivity, as human beings seem to be primarily the result of morphological evolution in a particular context.

In essence, the concept of anthropology was just an extension of an anatomical vision, dealing with the inherited differences between people: "variability presents major degree levels: one can study it as part of a race, of a species, of a gender ... the largest form in the animal kingdom, seen at the realisation in an infinite variety of form of the same fundamental tendencies of life" or "anatomy is the study of ontogeny, and ontogenesis is only an excerpt from phylogeny" (see the theories of E. Haeckel) (F.I. Rainer 2012, p. 54). For him, the anthropological study of humanity subsumed the study of all human forms, and made no difference between the study of an ovum or embryo, a fossil or a contemporary living being, as they all occupied different steps in the evolution of humanity: "the organism we have before us is in a curve phase of evolution, a trajectory which starts with a tiny part of a living substance, the ovum, and ends with the state of the organism for natural death. The title of "human" does not refer to one of this states, but to all, hence the necessity to know and compare all of these phases of evolution of the human organisms" (F. Scobaiu, mss). Thus, what mattered was to understand and describe the human species.

For this reason, in this anthropological paradigm the osteoarchaeological analyses (the study of human remains discovered in archaeological sites) were not a side-project, but lay the very foundations of the anthropological understanding, as they helped to understand the earlier stages of the contemporary man. As he mentions in some manuscripts, he was influenced by S. Tschulok's works (pioneer of cladistics), and the genealogical tree as imagined by H. Weinert¹⁰. Illustrative for this conception is the layout of F.I. Rainer's anthropological course from 1942: "Introduction. Man defined through the philogenesis of the nervous system; short view of the historical realization of the mammal organisation; the transformationist conception; the cytological basis of the heredity, mendelism, mendelism and anthropology, the importance of mutations. Human typology, constitutional types. Antropus phase. Primigenius phase. Homo sapiens fossilis phase. Human races. Presentation of European races". So, one can see the preeminent place of past human materialities in his lectures.

In this universe of concepts built inside the medical paradigm, the body-as-biological body occupied the center stage in defining (and classifying) individuals. He constructed an interesting paradigm, focused around the human body and which brought under the heading of "Anthropology" several disciplines: anatomy, evolutionary theory, history and anthropology. Understanding the way in which such a paradigm came into being is of relevance to the contemporary practitioners, physical anthropologists and archaeologists alike, as it invites to a reflexive attitude towards the methods and concepts we have inherited, and the implications of applying them.

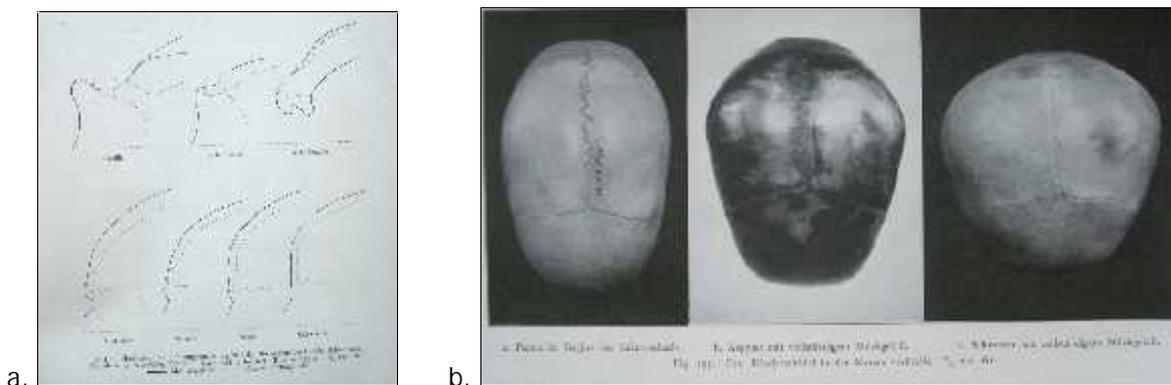


Fig. 7. a-b. Images of different cranial elements and three children skulls compared against each other "in vertical norm" (after Martin 1914).

Imagini ale diferitelor elemente craniene și trei craniile de copii comparate între ele "în norm verticală" (după R. Martin 1914).

¹⁰ German scientist interested in the origin of the human species.

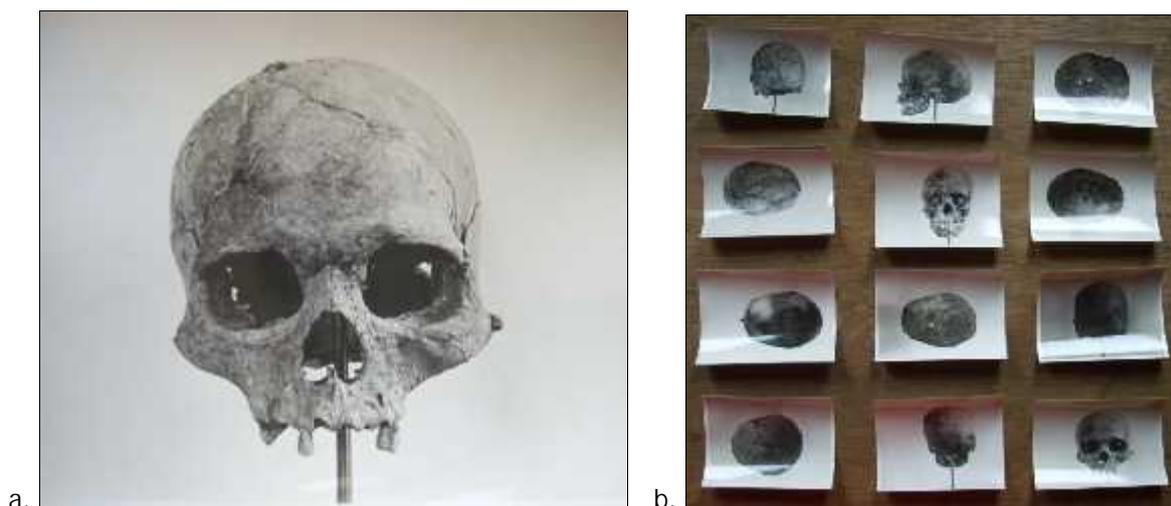


Fig. 8. a-b. Skulls of osteoarchaeological specimens. Images from the "Francisc I. Rainer" archive.
Cranii ale specimenelor osteoarheologice. Imagini din arhiva "Francisc I. Rainer".

◆ Acknowledgments

This work was supported by the strategic grant POSDRU/159/1.5/S/140863, Project ID 140863 (2014), co-financed by the European Social Fund within the Sectorial Operational Program Human Resources Development 2007 – 2013. I wish to express my gratitude to Director Dr. Cristiana Glavce for giving me permission of studying the "Francisc I. Rainer" archive of the Institute of Anthropology.

◆ Bibliography

- | | |
|--|--|
| D. Bori , J. Robb 2008 | Past Bodies: Body-Centered Research in Archaeology, Oxbow Books, Oxford. |
| R.H. Brady 1987 | Form and Cause in Goethe's Morphology, in F. Amrine, J. F. Zucker, Wheeler H. (eds.), Goethe and the Sciences: A Reappraisal Boston Studies in the Philosophy of Science, Vol. 97, p. 257-300. |
| M. Bucur 2005 | Eugenie i modernizare în România interbelic , Editura Polirom, Ia i. |
| R. Caspari 2003 | From Types to Populations: A Century of Race, Physical Anthropology, and the American Anthropological Association, American Anthropologist, 105 (1), p. 65–76. |
| Document June 28 th
1940 | Document June 28th 1940. File no. 511/p, p. 139, The Institute of Medicine and Pharmacy Record, Municipality of Bucharest Archives, Bucharest. |
| S. Dumitrescu,
M. Stîrcea-Crîciu (eds.)
2000 | Rainer, Centrul de Cercetări Antropologice, Academia Română , Editura Anastasia, Bucureşti. |
| C. Fowler 2002 | Body parts: Personhood and materiality in the Manx Neolithic, in Y. Hamilakis, M. Pluciennik, S. Tarlow (eds.), Thinking Through the Body, New York, Kluwer Academic, p. 47-69. |
| E. Hallam 2010 | Articulating bones: an epilogue, Journal of Material Culture, 15 (4), p. 465-492. |

- Y. Hamilakis et alii 2002 Y. Hamilakis, M. Pluciennik, S. Tarlow, *Thinking Through the Body*, Kluwer Academic, New York.
- A. Ion 2011 Is the body in pieces at peace? An analysis of the osteoarchaeological method, Master thesis, Mss.
- A. Ion 2014 (in print) Establishing Romanian anthropology: the foundation of the Institute of Anthropology "Francisc I. Rainer", *Annuaire Roumain d'Anthropologie*, 51.
- C. Krmpotich et alii 2010 C. Krmpotich, J. Fontein, J. Harries, The substance of bones: the emotive materiality and affective presence of human remains, *Journal of Material Culture*, 15 (4), p. 371-384.
- T. Lenoir 1987 The Eternal Laws of Form: Morphotypes and the Conditions of Existence in Goethe's Biological Thought, in F. Amrine, J.F. Zucker, H. Wheeler (eds.), *Goethe and the Sciences: A Reappraisal Boston*, Studies in the Philosophy of Science, Vol. 97, p. 17-28.
- M. Lynch 1985 Discipline and the material form of images: an analysis of scientific visibility, *Social Studies of Science*, 15, p. 37- 66.
- M. Lynch 1988 The externalized retina: Selection and mathematization in the visual documentation of objects in the life sciences, *Human Studies*, 11 (2-3), p. 201-234.
- A. Majuru 2013 Inter-disciplinaritatea ca principiu integrator al universalității la Francisc J. Rainer, Editura Muzeului Național al Literaturii Române, București.
- R. Martin 1914 *Lehrbuch der Anthropologie*, Gustav Fischer, Jena.
- L.A. Meskell, R. Joyce 2003 *Embodied Lives: Figuring Ancient Maya and Egyptian Experience*, Routledge, New York.
- .M. Milcu 1954 Dezvoltarea cercetărilor de antropologie în țara noastră, PA, 1, p. 7-29.
- .M. Milcu et alii 1947 .M. Milcu, I.T. Riga, A. Tudor, *L'Oeuvre Scientifique de Fr. Rainer. IV: Enseignement, Institutions, Collections*, Monitorul Oficial și Imprimeriile Statului, Official State Printing House, Bucharest.
- A. Morris-Reich 2012 Science and "Race", In Solomon Yudovin's *Photographic Documentation of Russian Jewry, 1912–1914*, *Images* 6 (1), p. 52 – 78.
- F.I. Rainer 1911 Manuscript, the archive of the Institute "Francisc I. Rainer".
- F.I. Rainer 1919 Class notes, manuscript, the archive of the Institute "Francisc I. Rainer".
- F.I. Rainer 1937 *Enquêtes anthropologiques dans trois villages roumains des Carpathes*. Bucharest.
- F.I. Rainer 1942 Class notes, manuscript, the archive of the Institute "Francisc I. Rainer".
- F.I. Rainer 1943 Class notes, manuscript, the archive of the Institute "Francisc I. Rainer".
- F.I. Rainer 2012 Însemnări zilnice. Conferințe. *Jurnale de cîntorie*, Ediție de A. Majuru, Editura Oscar Print, București.
- F. Rainer, I. Simionescu 1942 Sur le premier crâne d'homme paleolithique trouvé en Roumanie, *Analele Academiei Romane. Memoriile secțiunii științifice*, 3 (17), p. 489-503.
- A.E. Rautman, L.E. Talalay 2000 Introduction. Diverse approaches to the study of gender in archaeology, in A.E. Rautman (ed.), *Reading the Body: Representations and Remains in the Archaeological Record*, 1-12, University of Pennsylvania Press, Philadelphia.
- Th. Riga, Gh. Calin 1966 Francisc Rainer (anatomist, antropolog), Editura Științific, București.
- F. Scobaiu Manuscript, Archive of the Institute of Anthropology "Francisc I. Rainer".

- M. Sevastos 1946 (ed.) În amintirea profesorului Francisc J. Rainer, Imprimeria Națională, București.
- J.R. Sofaer 2006 The body as material culture. A theoretical osteoarchaeology, Cambridge University Press, Cambridge.
- J.R. Sofaer 2012 Touching the body: The living and the dead in Osteoarchaeology and the performance art of Marina Abramovi, Norwegian Archaeological Review, 45 (2), p. 1-16.
- L.N. Stutz 2008 More than Metaphor: Approaching the Human Cadaver in Archaeology, in F. Fahlander, T. Østigaard (eds.), The Materiality of Death, Archaeopress, Oxford, p. 17-68.
- J.S. Thomas 2002 Archaeology's humanism and the materiality of the body, in Y. Hamilakis, M. Pluciennik, S. Tarlow, Kluwer (eds.), Thinking Through the Body. Archaeologies of Corporeality, Springer, New York, p. 29-46.
- V. Toma 2010 From the dissection room to the first anthropological institute in Romania. Francisc I. Rainer and the „bridge” between anatomy and anthropology, Proceedings of the Romanian Academy, Seria B, 2, p. 157–165.
- M. Turda 2006 The nation as object: race, blood and biopolitics in interwar Romania, Slavic Review, 66 (3), p. 413-441.
- M. Turda 2007a Eugenics, Race and Nation in Central and Southeast Europe, 1900-1940: A Historiographic Overview, in M. Turda, P. Weindling (eds.), Blood and Homeland': Eugenics and Racial Nationalism in Central and Southeast Europe, 1900-1940, Central European University Press, Budapest, p. 1-22.
- M. Turda 2007b From craniology to serology: racial anthropology in interwar Hungary and Romania, Journal of the History of the Behavioral Sciences, 43, p. 361–377.
- M. Turda 2008 Eugenism și antropologia rasială în România, 1874-1944, Addenda Cuvântul.
- M. Turda 2010 Entangled traditions of race: physical anthropology in Hungary and Romania, 1900-1940, Focaal, 58 (3), p. 32-46.
- M. Turda 2013 In Search of Racial Types: Soldiers and the Anthropological Mapping of the Romanian Nation, 1914-1944, Patterns of Prejudice, 47 (1), p. 1-21.
- K. Verdery 2000 The Political Lives of Dead Bodies: Reburial and Postsocialist Change, Columbia University Press, New York.
- H.H. Wilder 1920 A laboratory manual of anthropometry, P. Blakiston's Son & Co, Philadelphia.