Bioarchaeology survey and workshop: 
Medieval “crisis” populations in Transylvania 
Odorheiu Secuiesc, Transylvania, Romania 
June 30th – August 10th, 2013

As the 15th century ends, the battle for Europe begins! The heroes (and their legend) that held back the Ottoman East, such as Vlad Dracula the Impaler, have died. The fall of Constantinople in 1453 and the European defeat at the Battle of Mohacs in 1526 opened the way for the Ottoman expansion into Europe. By 1529, Suleiman the Magnificent has conquered Southeastern Europe, and the Ottoman troops were battering the walls of Vienna.

The aim of this project is to evaluate how major global political events physically impact local populations. For that purpose, we will excavate a medieval cemetery and analyze the human remains from four other sites from central Transylvania, dating from the 15-17th centuries. The collection that we will study is housed at the “Haaz Rezso” Museum in Odorheiu Secuiesc, in the heart of Transylvania. A two week funerary excavation is conducted prior to the beginning of intensive osteology session. During these two weeks, students will receive daily intensive lectures on human anatomy and morphology. The excavation is followed by an advanced osteological survey. Students will then receive 3h lecture daily on theory and method in osteology and laboratory procedures prior to working directly on the bones.

Workshop Dates:
June 30 – August 10, 2013

Costs per session: US$1975
Includes:
- Registration fee $385
- Lodging for 6 weeks
- Excavation equipment
- Access to excavation site
- Access to the museum study collection
- Museum registration
- Security clearance
- Teaching material, support and documentation
- Laboratory material (except Lab coats)
- Lectures: 30hrs/session

For information and application procedure: www.archaeotek.org
Or contact us at bioarchaeology@archaeotek.org
Workshop: Bioarchaeological and osteological analysis of Late Middle Ages frontier populations: Human physical impact of political changes, Transylvania, Romania

Period: Late Middle Ages: 15-17th century

Workshop period: Bioarchaeology: June 30 – August 10, 2013 (6 weeks)

Historical Background:

As the 15th century ends, the southeastern European frontier collapses in front of the Ottoman Turks. The heroes (and their legend) that held back the Eastern invaders have died: Vlad Dracula the Impaler, prince of Wallachia in 1476; Holy Stephan the Great, prince of Moldavia in 1504; Skanderberg (Iskender Bey), lord of Albania in 1468. The fall of Constantinople in 1453 and the united European defeat at the great Battle of Mohacs in 1526 opened the way for the Ottoman expansion into Europe. By 1529, Suleiman the Magnificent has conquered southeastern Europe, the Kingdom of Hungary collapsed and the Ottoman troops were battering the walls of Vienna. The Ottoman expansions was finally checked in 1683, when the arrival of King Jan III Sobieski of Poland’s heavy cavalry charge under the walls of besieged Vienna broke the Ottoman army and won a crucial victory.

Transylvania was never invaded by the Turkish armies. The Saxon fortresses and the Szekely armies held the Ottomans armies at bay successfully. With the collapse of the Kingdom of Hungary in 1526, its Transylvanian territories became a political battlefield between European and the Ottoman backed princes until the Principality of Transylvania was born as an autonomous political entity in 1570. In 1600, Michael the Brave, with the support of the Transylvanian Szekely armies, beat the Ottoman and their supporters and realized the first union of the three Romania principalities into one kingdom.

Archaeological Contexts:

Excavation site (bioarchaeology / funerary excavation): Fenyéd (RO: Brădești) is found along the course of the Kükülő river at a mere 5 kilometer distance from Székelyudvarhely (RO: Odorheiu Secuiesc). The village sits between two cliffs: Kadicsfalvi Rez-plateau, made up of conglomerates and the Aklos, made of volcanic debris and the pebbled terrace of the Nagy-Küküllő (RO: Târnava Mare).

The first written source in which it is mentioned dates back to 1532, but according to archeological excavations, the settlement already existed as far back as the 12th century. Supposedly, its medieval church and cemetery date back to the same period. According to the data we currently possess, this church was rebuilt at the beginning of the 16th century in gothic style, as some of its sculpted elements had been built into today’s baroque church.
The village’s medieval church is not situated in the village’s center but is instead between Fenyéd and Küküllőkeményfalva (RO: Târnovița), on the right bank of the Nagy-Küküllő river, in a plowed field, in an area called Csonkatemplom (translating roughly into “broken church”).

The different orientation of the graves suggests two greater distinct periods. The artifacts recovered last year: hair pins with spherical globe shaped endings, hair rings, the Arpadian denar place the opening of the cemetery somewhere between the 12th-13th centuries. Pottery fragments dating to this same period were also recovered from the area around the church. The latest graves are the ones containing coffins. Judging by the inventory of the graves we could say the cemetery was still in use in the 17th century. Materials dating to later periods have not yet been found inside the graves.

Continued excavation may reveal new information regarding the cemetery’s northern and western range, and furthermore, by studying its walls we would discover the construction phases of this ecclesiastic building. Through a more thorough study of the cemetery we could also explore the reformation procedure of the village and then its return to Catholicism. These results could also shed light on the relation of the ecclesiae with its subsidiary Târnăveni.

Böögöz (RO: Mugeni) is among the largest and oldest villages along the Küküllő (RO: Târnava Mare). It sits in the wide basin, the Böögöz Basin found at the middle of the river’s central section, which due to its features is suitable for agriculture, and the surrounding hills for animal husbandry and orchards. It sits at a mere 11 kilometers from Udvarhely (RO: Odorheiu Secuiesc). Its first written account dates back to 1333. Its Catholic inhabitants convert to the Reformed faith following the Reformation.

Archeological excavations around the church in 2009 and later in 2012 have shown that the monument itself must have been erected some time during the 12th century and was significantly modified in the late 15th and early 16th century. The cemetery (223 excavated graves) surrounding the church was used up until the end of the 19th century, first by Catholics and then, starting with the 16th century by members of the Reformed Church.

Kányád (RO: Ulieş) is one of the villages found in the small valleys between the hills stretching along the Kükülő river. The village was established in a small depression. The first written reference to it dates back to 1333, but the archeological excavations done at its church suggest that its first church was built some time during the 12th century. Its inhabitants deal mostly with animal husbandry (cattle and sheep) and agriculture.

The settlement’s first church, built during the course of the 12th century and suffered numerous modifications, was finally demolished in 1791 and rebuilt in the center of the present day village. The archeological excavations of 2006-2007 yielded 61 graves.

Máréfalva (RO: Satu Mare) lies in the valley of Fenyéd creek, at the foot of the Cekend plateau, being a typical mountain foot village. Its name is first mentioned in 1566, but according to the evidence uncovered by archeological excavations done at its church, its first church was built during the Romanesque period (13th century). Its inhabitants constantly remained with the Catholic faith. The village’s surrounding area is highly unfavorable for agriculture and so the inhabitant’s main activities are animal husbandry and logging.

The archeological excavations were conducted in 2007-2008, in the medieval church’s sanctuary area and yielded 32 graves.
Telekfalva (RO: Teleac): The first written source dates its foundation back to 1566. However, according to archeological evidence, it seemed to have occurred much earlier, probably in the 13th century. The village is crossed by two creeks, Nyír and Bedő, which flow from the area around Nyír and respectively Telek and Szeged. It sits in a small closed valley surrounded. Today, its inhabitants live off livestock (cattle and sheep), agriculture (corn and cereals) and fruit cultivation (plums and apples), and following the Reformation, they chose to switch from Catholicism to the Reformed faith.

In Telekfalva (RO: Teleac) we do not know of any medieval church. Its Reformed church was during the period of the Principality, sometime after 1613. The entire interior of the church revealed 69 graves containing mostly remains of children. One of the skeletons, a woman, had her hand severed at the wrist. The excavated segment of the cemetery was used only for a few decades, as shown by the coins sometimes found in these graves.

Research Goals:

The aim of this project is to evaluate how major political events physically impact local populations. For that purpose, we will analyze the human remains from four different cemeteries from central Transylvania (Romania), dating from the 16-17th centuries. The five communities that were chosen for this purpose are in relative geographic proximity to one another but vary in their settled environment from low valley flood plain to hill top occupation.

The research itself has four distinct stages. First, we will pursue the funerary excavation of the Fenyed medieval cemetery which will provide students and volunteers with an actual sense of archaeological context and funerary ritual. The second one will address the four communities individually in order to assess the internal specific characteristics of each population. The third stage will evaluate the degree to which these discrete populations are integrated into a larger Transylvanian-Szekely population. And finally, we will evaluate how the political changes that impacted Transylvania during the 16-17th centuries have physically affected these populations, and to what degree and why there were differential changes within and between the four discrete populations during those events.

The bioarchaeology workshop will address these research questions and train the students to excavate human remains and conduct extensive osteological surveys. The goal is to achieve a better understanding of these populations and the changes that affected them by examining who they were, how they lived, and their adaptive strategies to outside stresses.

The collection that we will study is housed at the “Haaz Rezso” Museum in Odorheiu Secuiesc, Harghita County, in the heart of Transylvania. This summer’s workshop is designed to implement an exhaustive osteological survey as well as to select bones to be brought back for stable isotope analysis. Students will receive daily an intensive 2h lecture on theory and method in osteology prior to working on the bones. They will be taught how to clean and reconstruct bones, determine age, sex, stature, identify pathologies, trauma and take standard measurements. As well, they will be introduced to various osteological conservation problems aiming at properly evaluate bone quality for further analysis. This survey of bioarchaeological theory and method, coupled with hands on data gathering, is aimed at providing the students the analytical tools needed for the interpretation of the data they collect.

Bioarchaeology Section
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Workshop description

This workshop is intended to be combined funerary excavation and advanced osteology workshop. A two week hands on funerary excavation is included prior to the beginning of second osteology session. During these two weeks, students will excavate a 15-17th century cemetery for 6-7 hours/day followed by daily intensive lectures on human anatomy and morphology, preparing our participants for the more advanced osteology laboratory. As a result, this bioarchaeology workshop session provides an invaluable experience to both inexperienced and advanced students.

The laboratory part of the workshop will address more advanced issues on human anatomy, focusing on biomechanics and pathology. the format still includes group discussions, laboratory work, bone restoration and analysis, leading to individual and group research projects and presentations. Daily mandatory readings will accompany the specifics each lab day.

Project Objectives:

Funerary Excavation
1. Establishment of late medieval funerary behavior and its evolution
2. Identification of idiosyncratic ritual changes and their relationship to historical stresses
3. Local and regional patterns of interaction, mobility and association among various groups of individual
4. Ethnic historical evolution of the local and regional landscape

Taphonomy
1. Identification of post-mortem alterations on bones
   a. Identification of funeral practices: post-mortem treatment of bodies
   b. Identification of burial practices: primary, secondary and tertiary burials
   c. Identification of animal and/or vegetal alterations
2. Evaluation of conservation state and bone quality for analysis

Paleodemography
3. Creating a comparative base line for late medieval populations in order to evaluate changes through time and adaptive responses to socio-political and economic historical events.
4. Establishing the skeletal biology of individuals and populations from medieval Transylvania:

Estimation of: Identification of discrete and idiosyncratic traits:
   a. Sex a. Dental nonmetric variation
   b. Age b. Cranial nonmetric variation
   c. Stature c. Postcranial nonmetric variation
d. Ancestry
5. Establishing the skeletal health of individuals and populations from medieval Transylvania:

**Paleopathology**
- a. Congenital disease
- b. Dental disease
- c. Joint disease
- d. Infectious disease
- e. Metabolic and endocrine disease
- f. Neoplastic disease
- g. Trauma

**Paleonutrition**
- a. Isotopic reconstruction of diet
- b. Malnutrition related disease
- c. Nutritional deficiency related bone alterations

**Research team:**

1. Project Coordinator: Prof. Andre Gonciar (Director, Archaeological Techniques and Research Center, ArchaeoTek – Canada)
2. Research team: Dr. Zsolt Nyaradi (Expert Archaeologist – Haaz Rezso Museum of History and Ethnography, Odorheiu Secuiesc, Harghita County, Central Transylvania, Romania)

**Bibliography:**


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