1. Introduction

The Bhutan-Swiss Archaeology Project’s first phase (2008–10) was focused on the excavation of the Drapham Dzong ruins in the Bumthang valley (see corresponding SLSA annual reports). The second phase (2011–13) aims to achieve the implementation of the country’s first Archaeology Office under the Department for Conservation of Cultural Heritage Sites (Ministry of Home and Cultural Affairs) as well as to complete the modular teaching program in practical archaeology, which was set up by the Department of Prehistoric Archaeology of the University of Zurich. Semiannually, archaeological surveys, practical field schools and small excavations as well as theoretical classroom teaching modules have been conducted by Swiss experts (see corresponding SLSA annual reports). In the context of the project’s second phase, activities of many kinds took place in 2013.

Concerning practical teaching modules, Christian Bader conducted two field schools at the Chubjakha Dzong ruin at Paro, western Bhutan. In July and October/November, Bhutanese participants, mainly cultural officers from different districts and employees of the ministry, were trained in archaeological survey and mapping. The report of these modules can be found in this annual report as a separate article.

Theoretical classroom teaching was organized by Peter Fux and Christoph Walser from the University of Zurich. In October, they taught basic topics in archaeology, such as data management, reporting and public outreach. The module «Early Cultural History of the Himalayas» was conducted by Françoise Pommaret, CNRS France and Royal University of Bhutan. It should be pointed out that it was the first time that this topic was taught in Bhutan. The two-week courses were held at the national library in Thimphu. The report follows below.
After classroom teaching, Peter Fux, Christoph Walser and Namgyel Tshering conducted field surveys in the Tang and Phobjikha valleys. Together with local scholars the archaeologists followed still very vivid oral histories, mainly concerning saints and important gurus. However, many of the religiously significant spots turned out to be of archaeological importance and obviously are endangered of being destroyed soon. Since the discoveries are of huge importance, the survey report shall follow as a separate article.

After having successfully completed eight teaching modules (2011–13), nine participants are now approved to write a thesis which will allow the Department of Prehistoric Archaeology from the University of Zurich and SLSA to issue a post graduate diploma in practical field archaeology. Consequently, degree holders can be recruited by the Department for Conservation of Cultural Heritage Sites in order to run the central Archaeology Office. The authors are looking forward to receiving the first theses and positive signals concerning the institutionalization of the Archaeology Office within the next few weeks.

It is a result of the Bhutan-Swiss Archaeology Project that the Department of Town Planning of the city of Zurich got involved in Bhutan and devised an architectural development plan for the city of Jakar in the Bumthang district, together with the University of Applied Sciences and Arts Northwestern Switzerland (Institute of Architecture). However, we will not submit a report on this specific engagement here.

In the following, a review of the teaching modules conducted from October 8 to 18 is given. Due to the need of a fast internet connection, the first two teaching days dealing with digital geographical information systems and mapping were held at Migmar Hotel in Thimphu. After that, the team moved to the conference hall of the National Library. The authors express their gratitude to the colleagues of the Department for Conservation of Cultural Heritage Sites for organizing facilities and catering.
2. Teaching Module on Databases and Data Management

The Module Database and Data management for the certificate of advanced studies in Practical Field Archaeology was held between October 8 and 11, as mentioned further above, first at the Migmar Hotel and later at the National Library – both in Thimphu. The teaching was conducted by Christoph Walser.

The module was subdivided into three different thematic groups:

1. Structures and use of databases in archaeology
2. Databases as archaeological heritage management systems
3. Background systematics and practice of data based archaeological zoning plans.

The unit was further expanded to include the topic of data archiving by means of digital archives. Archives represent the cultural common memory. The goals of digital archiving are to permit easy and wide access to digital archaeological data for cultural, educational, and scientific purposes and to ensure long-term preservation of digital data so that it remains accessible for future use.³

During the teaching lesson the participants learned the basics behind archival strategies. They were also shown the most common digital data types which they may come across during their daily archaeological working routine and how to archive them, respectively which data formats to choose in order to guarantee future accessibility to the information that is stored within the data files. The presented guidelines and considerations⁷ follow the recommendations for digital archiving given by the Archaeological Data Service⁸ and Digital Antiquity.⁹

Another topic that was discussed during the workshop was the principals and basic use of databases in archaeology. Databases are a powerful instrument when it comes to storing, organizing and analyzing digital data. First, thought has been given to introduce the Integrated Archaeological Database (IADB) to the students, a database system that is further developed and maintained by the York Archaeological Trust.¹⁰ Unfortunately – during the teaching and discussions with the participants, who are also the potential future users of this highly sophisticated system¹¹ –, it became quite clear that this software would possibly overextend and overload the existing infrastructure and manpower of the upcoming archaeological department, at least for the moment being. Hence, a simple but suitable folder-based data structure was developed by the trainees during a group work session which can be used on the spot.

The last issue that was raised within the framework of this teaching module was archaeological zone planning. Zoning plans are an instrument for spatial planning that regulates the usage of the ground and is therefore inevitable when it comes to the planning of archaeological measures in the run-up to construction work, for example. Since this topic is highly related to spatial data and spatial information, a review and introduction to geographic information systems (GIS) with a focus on data structures, data models and coordinate systems was given beforehand. A very brief and practical...
introduction to the use of GIS in archaeology was already given during the survey field school in Bumthang held in 2012.12

Case studies of zoning plans from different Swiss cantons were presented to the students. Later on, they were taught how to set up a simple zoning plan by themselves. This was done in a very practically oriented way. The Quantum GIS software package13, a free and open source geographic information system that was already introduced to the trainees in 2012, was used to establish a zoning plan for the Jakar Valley based on the outcome14 of the field survey a year ago.

3. Teaching Modules on Archives, Reports and Public Outreach

The three topics were taught by Peter Fux from October 11 to 15, including group exercises, discussions and a visit of the Folk Heritage Museum.

The installation of both a material and document archive is a key task in the setup of an archaeology department. In the context of the Bhutan-Swiss Archaeology Project several excavations and surveys were conducted. As a result, manifold finds as well as documentation material need to be archived now. Although material and document archives require quite different basic conditions (temperature, humidity, light, etc.), they need to be interlinked systematically in order to make scientific and conservative sense. Therefore, after having discussed specific storage requirements of different materials (e.g. ceramics, metals, bones, textiles), basic methodological storage principles were explained by using examples from Swiss institutions such as the Cantonal Archaeology Department of Zurich and the Museum Rietberg. The key importance of a systematic organizing principle has to be highlighted as well as the facility requirements for material and document archives. Furthermore, inventory code systems and code application techniques for different material items were discussed. Special emphasis should be placed on the fact that a digital document archive would never be sufficient and physical document archive is mandatory – a point that should be made very clear nowadays.

During the one-day report module, the most basic principles of composing fieldwork reports were taught. The group learned about the following different report categories: fieldwork report, annual report, press information, and the scientific paper. For example, we discussed text disposition, language style, content and site description and its correct localization. As a practical group work, participants established the concept for an archaeological publication series issued by the future Bhutanese archaeology office. Since the most exigent task is the conduction of fieldwork reports, we set the main focus on this category.

The public outreach module not only involved general principles of public relation in archaeology as well as country specific tasks. In group works, we determined stakeholders, aims as well as communication plans and channels. The participants elaborated concepts for site information panels, brochures and press releases, mainly using their experience in practical fieldwork. Additionally, the overall public relation concept of the large-scale rescue excavation at Opéra in Zurich, conducted by the Department of Underwater Archaeology of the city of Zurich in 2010/11, served as an illustrative case study for public outreach in archaeology, and during our visit of the Folk Heritage Museum we discussed basic museological concepts. Since archaeology is a brand new discipline in Bhutan, public relationship is a key task in the setup of the archaeology office. However, some participants mentioned serious concerns of politicians. Their concern was that, as soon as potential common prehistoric cultural traits with territories of neighbor countries become public, Bhutanese territory will be claimed by other states. We think that the answer to this concern should be as follows. First, we are not aware of any case of territorial tenure on the basis of archaeological evidence, and second, a modern and well working national archaeology office would not only strengthen Bhutan’s knowledge about its prehistoric past but also demonstrate its technological and scientific level (see also our field survey article in this annual report).
4. Teaching Module on Early Cultural History of the Himalayas

This module, a first in an academic setting, was given in Thimphu by Françoise Pommaret, PhD, director of research, CNRS, France and adjunct professor, ILCS, Royal University of Bhutan. It was a three-day course, 16–18 October, from 9 am to 4 pm. The first half day was attended not only by the trainees, but also by officials from the Department of Culture, Ministry of Home and Cultural affairs.

The topics covered on the first day devoted to early Himalayan culture were an introduction on definition of the Himalayas and archaeology, an interdisciplinary quest (archaeological data can be supplemented by other disciplines in order to get a more relevant picture: history, oral history, geography, geology, linguistics, art, and now also genome studies). It was followed by a powerpoint lecture titled «An overview of time considered, places and subjects.» This was meant as an introduction to the different periods of prehistory: Stone age, Bronze age, Iron age; to the history of archaeological research in Tibet and the Himalayas, considering the Paleolithic period in Tibet and the Himalayas, the Neolithic period in Tibet and the Himalayas (habitat, people, structures and material artifacts: ruins, cemeteries, caves, tombs, megaliths, petroglyphs and pictographs, bones, arms/weapons, textiles, pottery, tools, ornaments), and finally approaches to bibliography. The question of time was very lively discussed as the trainees had never been exposed to this topic which turned out to be a whole new field opening up to them.

The second day was dedicated to material culture of the early Himalayan history (until 9th century AD) and its links with Bhutan. The powerpoint lecture included: reading maps, placing ancient kingdoms and giving examples of artifacts and constructions in Bhutan relating to the Tibetan empire extension, myths, the introduction of Buddhism, and artifacts (civilian and military architecture, temples, stone inscriptions/epigraphy, stone pillars, tombs and tumuli, ornaments, pottery, excrements, textiles, arms/weapons). It ended with bibliographical annotations. Again, the debate on time was lively because the trainees had no idea of Bhutan in a broader cultural context and the influences on the different artifacts and structures.

The third day was for exams and evaluation of the trainees with Peter Fux and Christian Bader. It was followed by a discussion where the trainees appreciated the relevance of this module in their work, but also expressed concerns about the lack of funds from the RGOB to conduct research in their districts.
5. Outlook

Nine participants successfully completed nine classroom and fieldwork teaching modules, developed by the Department for Prehistoric Archaeology of the University of Zurich and conducted in collaboration with SLSA, the Museum Rietberg, the Department of Town Planning of Zurich, Helvetas Swiss Intercooperation, and the Department for Conservation of Cultural Heritage Sites, Bhutan. The teaching modules were held from spring 2011 to autumn 2013 (second phase of the Bhutan-Swiss Archaeology Project; see corresponding SLSA annual reports). The students are now allowed to write a diploma thesis about selected topics. After submitting their thesis this spring, they will receive a Post Graduate Diploma in Practical Field Archaeology, issued by the Department of Prehistoric Archaeology, University of Zurich, and SLSA. With Swiss support, these diploma holders will be able to run the Bhutanese Central Archaeology Office and also establish archaeological zone plans and conduct rescue excavations. With that, the second phase of the Bhutan-Swiss Archaeology Project will be completed. In the context of the third project phase (2014–16), a Bhutan-Swiss collaboration is still seen to be necessary and welcome. However, it should be mentioned that the project’s steering committee declared the institutionalization of the Central Archaeology Office as a condition for adopting the Swiss engagement and the project’s third phase.

The focus of the third project phase will be set on the development of archaeological zone plans, rescue excavations and carefully selected research excavations. The Swiss team is looking forward to further collaboration.

Bibliography