1 – INTRODUCTION

"Textiles, especially the cloth of individual attire and accessories, are perhaps the most personal of artefacts that the archaeologist can hope to recover" (Clark 1993, 5).

1.1 Woven cloth in Andean cultures

Up to today, the indigenous population of the Andes has proudly produced hand woven garments on weaving looms that have not changed since the European colonists took over their lands and changed virtually every other aspect of their lives. The production of hand woven fabrics is very labour intensive and every step requires decisions that are related to the cultural environment in which the weaver lives. As a result, a woven cloth contains information about the identity of the weaver, which may range from the region he or she lives in, the village and family he/she belongs to, his/her social status and age, as well as his/her dexterity on the loom and desire for artistic, innovating expression. The social space of a community may be read from the woven details, as well as information on the agricultural cycle, land and animal ownership. Those who are familiar with the clothing etiquette, know how to read these hidden messages (Ackerman 1996; Arnold 1997; Asturias 1996; Braunsberger de Solari 1983; Cereceda 1986; Desrosier 1992; Dransart 1995; Franquemont 1986; Franquemont et al. 1992; Mayén 1996, 94; Medlin 1996; Pancake 1996; Seibold 1992; Silverman 1994; Torrico ms; Zorn 1987).

Typically, every Andean region and each village has its own style of dressing, stimulated by their relative isolation due to the steep Andean mountains and large stretches of coastal desert. To the outsider, the traditional Andean clothing style and weaving practices appear to be very conservative. However, the tradition is far from being static. Instead, the production of garments is in constant process of modification. The reproduction of traditional designs and forms depends on the availability of materials and spare time, as well as on the modest innovations that each weaver introduces to satisfy his/her personal taste and creativity. New stylistic elements may also be introduced from outside the community, when trade introduces foreign objects with exotic decorations and/or new techniques and materials. When new styles become popular, they will eventually replace the old ones. Today for instance, the children’s schoolbooks’ illustrations have become a popular source of inspiration for woven designs, as if to demonstrate the literacy of the weaver (Femenias 1996, 180; Medlin 1996, 262-264; Meisch 1996, 147-153; Seibold 1992, 198).

Obviously, Andean clothing is not just meant to cover the human body for warmth and modesty, but is laden with symbolic messages that accompany the owner throughout his or her life. In Andean communities, in the past as well as today, small babies are still carried in large woven cloths on the back of their mothers, while the ceremonial first hair cut of a two year old boy or girl (chuqcharwuy in Quechua) is stored in a special cloth. The reaching of adolescence is indicated by starting to wear adult clothing and the desire for a partner is expressed by special garments or mode of wearing them. Home made garments and cloth containers are still considered to be proper attire for public festivals or domestic rituals, even if the man or woman normally goes dressed in western clothes. Political and religious community cargos require a particular outfit that may cost many months of income, while the local saint’s statue receives a precious new attire. Clothes may even be used in witchcraft to harm their owner. When a person has died, his or her clothes need to be washed in a special part of a river in a p’achat’aqsay ritual in order to rinse the essence of the owner (Ackerman 1996, 240-253; Betanzos 1987 [1551], cap. XIV, 65-70; Gieza 1995 [1553] Lib. II, cap. VII, 16-20; Garcilaso 1929 [1609], 134; Murúa 1987 [1590], Lib. II, cap XV, 383).

In an illiterate society, symbolic communication is very important. The Andean cultures did not use an alphabet like their European conquerors. Instead, they expressed their messages in textile codes. Some of them were straight forward, such as the quipu, a counting device of bundled strings, whose colours represented categories of provinces, people or products, while the knots in the strings were related to decimal counting. More illusive, however, were the woven designs. Such designs sent out symbolic messages that could only be understood by
people familiar with the cultural coding. From a semiotic perspective, a text is defined as all that uses symbols to transmit a message that is comprehensible to the receiver (Geertz 1983). In this sense, textile symbolism can indeed be considered as a text, requiring both the emitter (weaver), the message (structure, design and colours of the woven cloth) and the receiver (observers).

Some woven (combination of) designs may have symbolized names and abstract ideas. For instance, the square, geometric tocapu designs, worn and supposedly understood by the Inca nobility only, are thought to be such symbols. Various regional weaving styles still contain messages for the local population. Andean studies reveal that the most prominent stylistic features express the regional and/or ethnic affiliation of the weaver, followed by more modest expressions of family relations, personal status, etc. (Meisch 1987; Seibold 1992; Silverman 1994, 19-21; Wilson 1996; Zuidema 1999).

Such messaging was also present in the precolumbian weavings, as the Incas are known to have insisted that each group of people would dress in their local style garments and headgear for easy identification of ethnic groups and social ranking. Wearing clothes of higher status or of other ethnic groups was even severely punished (Polo 1990 [1571], 117-118; Cieza 1995 [1553] Lib. II, cap. XIX, 55).

To the astonishment of the Spanish conquerors, the Incas valued finely woven cumbi cloth more than gold or silver objects. The production of such large quantities of textiles formed an important source of tax labour for the Inca state, and almost equalled the importance of state organized agricultural labour. Crude garments, called ahuasca, were produced on household level, while precious cumbi fabrics were woven by specialist weavers, both male and female. Cumbi cloths were destined for the Inca nobles and gods only, and formed highly esteemed rewards for outstanding services for the state or for the construction of new political alliances. Like today, textiles formed indispensable gifts in all kinds of domestic or public rituals (Cobo 1990 [1653] Lib. XIV, cap. 11; Garcilaso 1960 Lib. V, cap. XII, 163; Murra 1975, 146, 151-152).

Warehouses full of textiles were found along the Inca roads, waiting for redistribution among the state’s subjects as compensation for their obligatory labour for the Inca state. For instance, military service in the Inca army was compensated with little more than a tunic and a mantle, while the morale of an army could be animated with the promise of textiles to loot (Polo 1990 [1571], 116; Xeres 1872 [1534], 60; Murra 1975, 157-159).

Part of this esteem was directly related to the magic-religious significance of cloth. The precious weavings were among the most suitable gifts for the gods, either to dress or constitute a god’s statue, or to be sent to the gods by burning them (Cobo 1990 [1653] Lib XIII, cap. 5, cap. 22, cap. 25). In addition, garments were believed to be imbued with the essence of the owner, and as such could serve as substitute to harm or even kill that person. The Inca king himself wore his clothes only once, after which they were carefully stored until they were burned en mass (Zárate 1598, cap. IX, 28).

In short, textile production in Inca times was not just a culturally determined household activity, but was of actual political, economic and religious importance. This prominent position of textiles has been preserved among the present Andean communities. Whereas the production of stone and ceramic artefacts has been replaced by industrial products, hand-made weavings are still considered indispensable on numerous occasions. The descriptions of the earliest Spanish chroniclers on the uses and importance of Andean weavings are like echoes of today’s weavers explaining their work.

1.2 General contents and objectives of this research

The present research is centred around the textile collections from four late- and post-Tiwanaku sites from the middle and lower Osmore valley in the extreme south of Peru, roughly dated A.D. 1000. The Osmore drainage lies in a region referred to as ‘South Central Andes’. This region is concentrated around the Titicaca Basin and knew a longstanding cultural, economic, and political tradition. Its boundaries cut through four modern political subdivisions: southern Peru, northern Chile, western Bolivia and northwestern Argentina. Along the coast, it reaches from the Majes drainage near modern Arequipa to the Chilean port of Antofagasta in the south, while inland it reaches from Sicuani in the highlands near Cuzco, through Cochabamba at the eastern slopes of the Bolivian Andes, ending in Chañaral
in Argentina. The Osmore drainage is one of the small rivers that run straight down the western flanks of the Andes, more or less in southwestern direction. It is separated from other narrow valleys by vast expanses of extreme dry desert. The first valley to the north is the Tambo valley at some 60 kilometres distance and to the south the Locumba valley at about 40 kilometres distance (fig. 1.1).

Three of the sites are located in the lower coastal section: El Descanso, El Algodonal, and La Cruz. Chen Chen is situated in the middle section, just above modern Moquegua. One extra textile has been included in this study that originates from the coastal Boca del Río, also known as San Gerónimo (fig. 1.2).

Textile remains are not a common source of archaeological research, as their fragile, organic nature rarely allows preservation in archaeological contexts. Only in extreme dry environments such as deserts or caves, or in extreme wet and oxygen-free environments, will textiles withstand the natural process of decay. This is unfortunate as textiles and especially daily attire have been demonstrated to form the most suitable material to express a people’s social and ethnic identity, today as well as in the past. In order to identify such expressions within a group, the complete textile collection of each of the four sites needs to be analysed, rather than singling out some of the most diagnostic types. This requires a detailed study of the qualitative and quantitative elements of each textile specimen, including the original form and function, as well as the structure and fibres applied and, if present, its design.

The textile data is used to address some questions that have been subject of various studies in the Osmore drainage and in fact in the whole South Central Andean region, which mainly focus on the Tiwanaku state organization and on the identity and interrelationships of the middle and lower valley’s inhabitants during and immediately after the Tiwanaku influence. Archaeological studies include valley-wide surveys (Goldstein 1989; Owen 1993; Stanish 1985), studies of ceramics (Goldstein 1989; Jessup 1991; Owen 1993), of osteological remains (Blom 1999; Blom et al. 1998; Buikstra 1989; Lozada 1998; Sutter 1997), of subsistence and house patterns (Goldstein 1989; Owen 1993; Reycraft 1998), and so forth. Only more recently have textiles been discovered as powerful carriers of cultural information (Boytner 1998; Cassman 1997; Clark 1993; Reycraft 1998).

In total, 586 textile specimens from four sites have been examined, originating from the sites Chen Chen in the middle Osmore valley and La Cruz, El Descanso, and Algodonal Ladera in the lower Osmore valley, plus one specimen from Boca del Río at the coast for its unique features. They are believed to date from more or less the same time period, that is, from the final stages of the Tiwanaku culture or immediately after (± A.D. 900-1000). Most textiles have been derived from small scale rescue excavations, which took place between 1987 and 2000. The author did not participate in these excavations, except for few days of fieldwork in the El Descanso 1999 (2nd period) campaign. Therefore, she had no influence over the excavation methods, nor over the taking of field notes or the initial storage of the textile specimens.

Prior to the presentation of the textile collection, the required background information needs to be presented. The theoretical background of this study’s objectives is summarized in Chapter 2. Chapter 3 describes the systematic methodology for textile analysis used in this study. For this study, the methodology developed by Clark (1993) was chosen, which is based on guidelines by King (1978) and descriptive terminology by Emery (1980). It requires the examination of each specimen’s fibre, structure, design, form, function, and contextual data. To this textile analysis method, Cassman’s (1997) design categories for tunics, bags, and cloths were added to facilitate the comparison between the Osmore and the contemporary Azapa archaeological textile collections. Colour descriptions have been made accessible by using colour codes linked to the Munsell Colour Chart. Such standardized documentation is strongly recommended to systematize textile studies and allow interregional comparisons of archaeological textile collections.

Chapter 4 summarizes the results of a thorough ethnographic investigation by the author of the modern textile production in a Quechua community in the Puno department in the extreme south of Peru. Observing the yarn production and weaving process allowed the author to make calculations of the time and material investment for each individual textile. In addition, many of the Osmore archaeological fabrics were made with remarkable similar shape, structure, and design by modern Quechua weavers, which
Fig. 1.1 Geographical position of the South Central Andean Region and the Osmore Valley (after Owen 1993, 4)
Fig. 1.2 Geographical position of the five sites of this textile research (after Williams et al. 2001, 71)
provides direct insight in the function and exact manufacture methods of the ancient textiles.

The thesis then focuses on the specific Osmore situation. The geography of the Osmore drainage and of each of these four sites is introduced in Chapter 5, and the habitation history of this valley and the wider region in Chapter 6, with special attention for the Tiwanaku, Ilo-Tumilaca/Cabuza and Chiribaya cultural phases. The objectives of this study may then be summarized as follows, in the order of their appearance in the text:

First objective: demonstrating the applicability of ethnographic data in archaeological textile studies
The first objective is to show the indispensable contribution of modern Andean weaving techniques to archaeological textile studies. The author herself performed a thorough investigation of the modern textile production in Cuyo Cuyo, a Quechua community in the Puno department (Minkes 2000). The investigation showed that the modern spinning and weaving tools and techniques are identical to those found in archaeological context, and thus allowed a direct view into the ancient Andean textile production. In addition, useful information was gathered on the production of asymmetrical fabric shapes and on the insertion of discontinuous warp elements (Chapter 4).

Second objective: summarizing the Tiwanaku, Ilo-Tumilaca/Cabuza and Chiribaya textile traditions
Over the years, considerable information has been published about the Tiwanaku textile tradition. However, these publications are usually focused on a few precious fabrics, while the mass of crude garments of the Tiwanaku common people remains unknown. Even less information is available on the Ilo-Tumilaca/Cabuza and Chiribaya textile traditions, as the information comes from field reports and from local magazines that are difficult to obtain outside Peru, Chile, or Bolivia. In this study, all data available on these three textile traditions are summarized as they proved to be indispensable for the identification of the textiles and thus of the sites of study (Chapter 7).

Third objective: presenting the Osmore textiles
The textiles of this study are presented per site, Chen Chen, La Cruz, El Descanso, Algodonal Ladera and Boca del Río. Per site, the textiles have been further subdivided according to functional type. Throughout the study, these types are named by their Spanish names, because they are most commonly used in Andean textile studies and more unity in terminology is recommended. Information is given on the fibre and the applied structures, as well as on the form, sizes, and decorations of the fabrics, and on the traces of wear and repair. Some textiles are illustrated in the text, whereas all diagnostic specimen can be consulted on the included CD-rom (Chapter 8).

Fourth objective: identifying the cultural identity of the lower Osmore people
Textiles are only recently appreciated as artefacts with great potential to distinguish the identities of groups of people. The multiple decisions that are made to produce a textile are culture-laden and thus will reveal the population’s identity, even if its weavers attempt to copy textiles from elsewhere. In Chapter 9, the textile data are applied to make a contribution to the much debated identity of the people living in the lower Osmore valley during the final phase of the Tiwanaku culture and immediately after its collapse, then known as Ilo-Tumilaca/Cabuza and Chiribaya cultures.

Fifth objective: explore the potential of the Osmore textiles in combination with their contextual data
In Chapter 10, the textile data are joined with their available contextual information in order to reconstruct the social-political organization of the Osmore society. The excellent preservation of organic material allowed a reconstruction of the preparation of a funeral bundle and the placement of textiles and other grave gifts on the body and inside the tomb, thus allowing insight the Osmore death ritual.

Each individual’s total textile assemblage was then combined with the available information on the deceased individual, the tomb construction, and the nature and quantity of other grave gifts. The contextual data of each tomb allowed making assessments of the relative importance of textiles within the grave furnishing. The combination of textile data with their contextual information allows the identification of subgroups among each cemetery population, such as sex and age groups. In addition, qualitative and quantitative differences of the associated artefacts will indicate the
presence of different social classes on intrasite as well as on intersite level, whereas exclusive garment shapes or decoration styles may be indicative of cohabiting ethnic groups. Finally, the nature of the associated grave goods may indicate craft specialization per site. Unfortunately, much of the contextual data of this study’s textiles proved to be missing, yielding very poor results on this interesting topic.

**Sixth objective: interregional comparison of South Central Andean textile studies**

The final objective of this textile study is to compare the Osmore textile assemblages with the archaeological textile collections from other regions that once fell within the Tiwanaku influence sphere or slightly beyond. Archaeological textile analyses have been published for the lower and higher Osmore drainage, for the coastal Azapa valley and the oasis of San Pedro de Atacama in northern Chile, and for the Arequipa area to the north of the Osmore drainage. What is missing in all of these publications is a synthesis of the textile tradition of the South Central Andean region during the final Tiwanaku decades and the period immediately after the empire’s collapse. Such regional synthesis is presented in Chapter 11.