AN OVERVIEW AND ANALYSIS OF 'PROTO-SUSQUEHANNOCK' SITES IN THE UPPER SUSQUEHANNA RIVER VALLEY

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ABSTRACT

The Upper Susquehanna Valley region is thought to be the homeland of the Susquehannock Indians, historically known to reside in south-central Pennsylvania. The Susquehannock sites in this region, called 'Proto-Susquehannock' by many, are understudied and provide nebulous answers to the question of Susquehannock origins. This thesis provides a compilation of Proto-Susquehannock research including information on excavation history, site location, artifact assemblages, and past research on forty-five sites labeled as Proto-Susquehannock. Intended as background research for future Proto-Susquehannock studies, the thesis also delves into definitional problems hindering research in this area, focusing on terms such as *protohistoric* and *Proto-Susquehannock* and the pottery variants often associated with the Susquehannocks (Richmond Mills Incised, Proto-Susquehannock, and Schultz Incised) and the lack of consistent and operational definitions associated with each term. The thesis concludes with the statement that additional research is necessary in the Upper Susquehanna River Valley to successfully create a comprehensive history of the Susquehannocks.

BIOGRAPHICAL SKETCH

Jasmine Gollup was born in Lothian, Maryland, USA. She graduated from Southern Senior High School in 2005 with memberships in the National Honor Society, Tri-M Music Honor Society, and International Thespian Society. She received a dual degree in History and Sociology/Anthropology with a concentration in Archaeology from Elizabethtown College, graduating magna cum laude in 2009. A graduating member of the Elizabethtown College Honors Program, she is also a member of the Alpha Lambda Delta, Phi Alpha Theta, and Lambda Alpha honor societies.

During an internship at Historic Londontown and Gardens (Edgewater, Maryland), she discovered a passion for archaeology and historic interpretation, becoming a docent and interpreter at the site and later working at Historic St. Mary's City, Maryland, as an archaeological field technician. Her archaeological research interests focus on Amerindian sites in the northeast during European expansion. She has participated in a variety of excavations including a 17th century Susquehannock site and a French and Indian War site in Pennsylvania, as well as colonial sites and an Indigenous site in Maryland, and a 14th century site in Belgium.

Jasmine is also an avid violinist and has enjoyed playing in symphonic and pit orchestras as well as quartets since she was eight years old. She devotes her spare time to animal rescue organizations, working to raise funds for and to aid abandoned and neglected animals.

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CHAPTER 1

INTRODUCTION

The Susquehannock Indians are historically and popularly known as the dominant Indigenous tribe in seventeenth-century Pennsylvania (Figure 1.1). Strategically located on the Susquehanna River throughout Lancaster County, Pennsylvania, the politically and economically influential Susquehannocks were prominent traders with the Dutch, English, and Swedish colonies throughout the seventeenth century, providing a crucial economic link between the early European coastal settlements and the fur-trappers of the interior. The apex of Susquehannock influence can tentatively be temporally defined as the mid-seventeenth century, after which they became embroiled in hostilities with both Europeans (the colony of Maryland) and other Indigenous groups (the Iroquois) suffering defeat at the hands of the Iroquois in the third quarter of the century.

After losing their celebrated economic role, the Susquehannocks gradually faded from historical consciousness, their story supposedly ending in 1763 when the "Paxton Boys" massacred the last-known (and documented) Susquehannocks (Kent 2001[1]). Although the United States government today does not recognize the Susquehannocks as an official Native group, there are Native people who retain cultural and genetic connections to and affiliations with the Susquehannock people.

While relatively well-known historically, the origins of the Susquehannock people remain a mystery. Thought to be close relatives of the New York Iroquoians, the historically-known Susquehannocks share many traits in common with the Five Nations Iroquois including a similar language, culture, and religion (Kent 2001).

[1] Susquehanna's Indians was originally published in 1984. The 2001 reprint contains few changes to the overall content of the work, with the major addition being an addendum describing archaeological discoveries since the original research was completed.

Consequently, Kent (2001) believes that the Susquehannocks migrated south from present-day New York in the years before European exploration, often focusing on the Upper Susquehanna River Valley, an area straddling New York and Pennsylvania, as a convenient homeland.

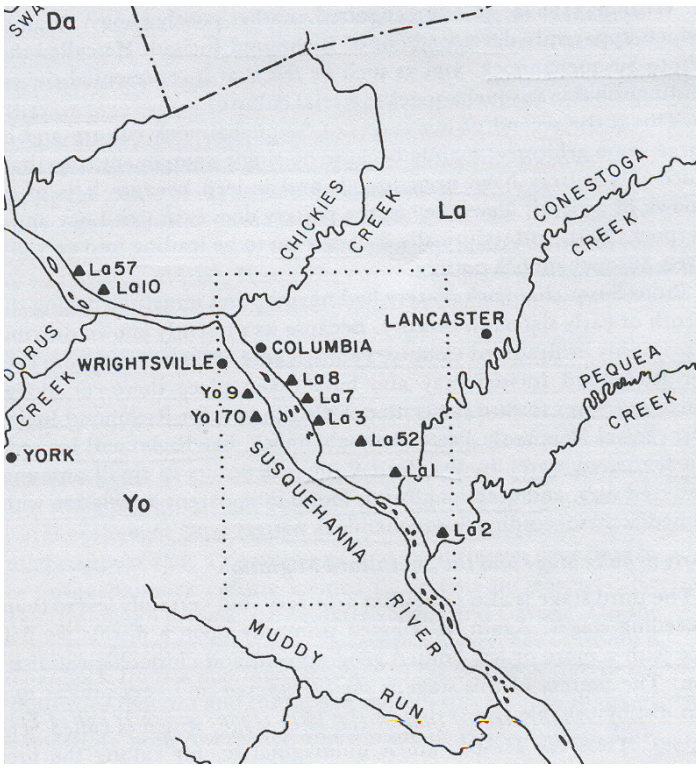

Figure 1.1. Historic Susquehannock sites in Lancaster County, Pennsylvania. Site names: Roberts (36La1); Shenks Ferry (36La2); Strickler (36La3); Schultz (36La7); Washington Boro (36La8); Billmyer (36La10); Conestoga Town (36La52); Conoy Town (36La57); Oscar Leibhart (36Yo9); Byrd Leibhart (36Yo170). From Kent 2001:16

While believed to be the most likely area to contain traces of early Susquehannock, or "Proto-Susquehannock" occupation, the Upper Susquehanna River Valley has received relatively little archaeological attention when compared to the Lower Susquehanna River Valley Susquehannock sites. Encompassing Tioga County, New York and Bradford County, Pennsylvania, the Upper Susquehanna River Valley

contains over forty sites that have been labeled Proto-Susquehannock, but few professional excavations have been undertaken in the area and the majority were conducted prior to 1970. Peaking in the mid-20th century, archaeological excavations in Bradford County varied in intent and quality, with many focusing only on burials and the acquisition of grave items and few producing any valuable field records. Subsequently, interpretational research on these sites is practically non-existent as researchers struggle with an obvious paucity of information, often reproducing information from a select handful of sources. As a result of this lack of professional interest, these sites are often relatively unknown to those living outside of the region.

Goals

It is this dearth of information that I wish to address. The intent of this thesis is to synthesize all available past research on the archaeological sites in the Upper Susquehanna River Valley. Focusing on excavation history, I will present basic information including site locations, excavation methodology, artifact assemblage, and summaries of past research from those sites labeled by others as Proto-Susquehannock or Protohistoric. Through this thesis, I hope to create a foundation for future research on the Susquehannocks in this area and to generate essential questions that must be addressed for the successful creation of a comprehensive history. I also hope to present and describe shortcomings in current terminology used in Susquehannock and Indigenous archaeological research, including, but not limited to: protohistoric, proto-Susquehannock, and the pottery variants of Richmond Mills Incised, Proto-Susquehannock, and Schultz Incised. By accumulating this information in one source, I distinguish patterns that allow further interpretation of these sites.

Before I begin, I must state what this thesis is not. I will not attempt to define the Susquehannock tradition. Although I do believe the current definition to be based on a flawed and outdated theoretical paradigm, particularly in relation to the Proto-

Susquehannocks, I do not currently have the background and experience to undertake such an enormous task. While I do address the issue in several places, this thesis is not a declaration on the origin of the Susquehannocks. Furthermore, I, in no way, believe this to be a definitive statement on the excavation and contents of the archaeological sites examined. While I have utilized every resource available to me, it is likely that some records have been missed, particularly those that remain unpublished or even unwritten. The prevalence and unusually high activity of amateur collectors in the region guarantees that one cannot gather every piece of information.

I have purposively disregarded artifact examination from this study for several reasons. First, I believe that the background of these sites must be thoroughly examined before artifactual evidence is considered. As such, analysis of artifacts from these sites is beyond the scope of this thesis. Second, the definitions used to describe the Susquehannocks, both temporally and culturally, are unclear. Attempting to analyze artifacts by these nebulous definitions would only further confusion. Finally, the state of artifact collections from these sites is less than ideal. The large proportion of artifacts were collected by amateurs and, if donated to a museum collection, often lack the most basic contextual information making interpretation nearly impossible. Furthermore, collections, both from professional and private endeavors, are generally not fully catalogued or analyzed. A complete re-analysis of all artifacts would be necessary before intense interpretive work can begin.

Chapter Descriptions

Chapter 2 provides necessary background information for the upcoming chapters and interpretation. Terminological issues are brought to light, highlighting the discrepancies in the varying definitions of the terms *protohistoric* as well as *Proto-Susquehannock* and *protohistoric Susquehannock*. Such definitional issues question the conclusions of past researchers and restrict the interpretations of present scholars.

A brief outline of the Amerindian as well as the early European-Amerindian trade is provided, focusing on the roots of economic interaction as well as objects typically traded including marine shell and copper-based objects. Essential to interpretation of the Susquehannocks, the role of major waterways in the northeast, particularly the Saint Lawrence River and Susquehanna River, is discussed. The discussion then focuses on what little is known or hypothesized about the Susquehannocks in prehistory. Origin theories based on linguistics and ceramic seriation are explained and issues with the crucial culture-history approach are noted.

Chapter 3 focuses on the excavation and research history of the Upper Susquehanna River Valley. Beginning with a description of past excavations, the archaeological exploits of archaeologists Warren K. Moorehead, James B. Griffin, and Ira F. Smith III will be discussed as well as the research work of past scholars ranging from Louise Welles Murray, to John Witthoft, Charles Lucy, and Barry Kent. Excavation information will then be presented on forty-five sites in this region that have been labeled Proto-Susquehannock or Susquehannock by past scholars. Very little information of archaeological significance is available for the vast majority of these sites, with only a handful prominent in archaeological publications. The geographical location, excavation history, temporal and cultural placement, and artifact assemblage of each site is described when available. I then analyze the information presented against past research, hoping to uncover patterns indiscernible to those who have only focused on individual sites.

As ceramic seriation has played a pivotal role in the classification of the Susquehannock culture, Chapter 4 centers on the three pottery types often associated with the Proto-Susquehannocks: Richmond Mills Incised, Proto-Susquehannock, and Schultz Incised. A description of these types will highlight their relationship and similarity to Iroquoian forms as well as demonstrate the close association between the

three. By focusing on discrepancies in definition between researchers on these three types, I hope to highlight the difficulty in identification that could quite possibly lead to misinterpretation of the Upper Susquehanna sites. I then provide an analysis of the Proto-Susquehannock sites through ceramic seriation, uncovering several interesting patterns in the distribution and usage of each ware.

Chapter 5 builds on the issues discussed in chapter four, focusing on the phenomenon of foreign or 'exotic' pottery on aboriginal sites. Believed by many to infer the presence of hostilities between groups, the presence of foreign pottery can be explained through a variety of forces leading to very different interpretations of a site assemblage. By focusing on the various reasons for foreign pottery on a particular site, I question the identification of some of the studied sites as Proto-Susquehannock.

Chapter 6 recaps the information presented in this thesis, focusing primarily on the question of whether these Upper Susquehanna Valley sites can qualify as Proto-Susquehannock. Issues that prevent concrete identification of these sites as Proto-Susquehannock are explained including definitional discrepancies, the inadequacy of the culture-history theoretical mindset, and the insufficient archaeological exploration of the region. Suggestions for future research are presented and a tentative conclusion is reached.

CHAPTER 2

PROTOHISTORY

The term *protohistoric* has been used to describe the Susquehannocks of the upper Susquehanna River Valley. While most researchers of this region utilize the term, few provide an explicit definition and the explanations given by those few very often do not match. As a result, different interpretations of the term protohistoric have emerged, leading disparate sites to be labeled as protohistoric and creating confusion for area scholars. Furthermore, the term is simply not recognized by some researchers who prefer to use "contact period" terminology, while still others utilize both contact and protohistoric terms.

In simplest terms, the prefix proto- means first, foremost, or earliest form of (dictionary.com Unabridged. Retrieved June 27, 2010). The term protohistoric quite literally means the earliest form of the historic period. Researchers utilize the term as an important descriptive link between the prehistoric and the historic eras (Noble 2004:179). Wilcox and Masse (1981) define the protohistoric period in the American Southwest as the time "Between prehistory and the ethnographic present...a time of transition during which the societies of the North American Southwest experienced radical systematic changes brought about by their articulation with the European world system" (1). While this definition may adequately reflect the time period, it is not archaeologically operational.

The only article on Northeastern Indigenous archaeology to provide a definition of the term protohistoric (Noble 2004) references an article written by Bernard Fontana (1965) that defines a five-fold classification system of historic sites. Fontana's system places sites into one of five temporal categories: protohistoric, contact, postcontact, frontier, and nonaboriginal, based on the degree to which a site is

"Indian" (Fontana 1965:61). Fontana (1965) defines the protohistoric period sites as "aboriginal sites in which there is evidence of nonaboriginal culture but which were occupied before the arrival of nonaborigines on the immediate scene" (62). European goods are present, but Europeans themselves are not. Fontana claims that protohistoric sites can be distinguished by the presence of European goods and a lack of documentary evidence (1965:62).

There are several problems with this definition, the first being that it is necessarily fluid. Dates for protohistoric sites, by this definition, must be done on a site-by-site basis. Indigenous groups that occupied multiple sites may fall into different categories. The definition is also, necessarily, focused on sites, not people. Individuals, in the form of trading parties, travelers, or warriors, may have had contact with Europeans, yet the physical presence of a European on the Indigenous site is crucial. Fontana describes the contact period sites as those actually visited by non-Indians and states that they are usually documented (1965:62). The key problem with this definition is that it relies on documentation to distinguish between the phases and unrealistically assumes that every visit by Europeans is documented.

Despite the differing definitions provided by Fontana, the term protohistoric is sometimes used synonymously and interchangeably with contact terminology. Grumet describes the contact period as a time when trade of European goods began (1995:28), and makes no distinction between the presence of goods versus the presence of people. The confusion resulting from these conflicting definitions has led to liberal use of the term protohistoric. Based on the aforementioned research (Fontana 1965:61; Noble 2004:180), for the purposes of this thesis the term *protohistoric* can be tentatively theoretically defined as a period marked by the appearance of European trade goods without the known direct appearance of Europeans themselves.

Early European Trade

A brief outline of the early European-Amerindian trade is necessary to fully understand and utilize the protohistoric concept. Trade is defined as the reciprocal and usually amicable exchange of goods between two parties (Pendergast 1994:7). European traders entered a pre-existing complex inter-tribal trading system based around river systems. The archaeological record demonstrates native ability, both pre- and post-Columbian, to move materials over great distances (Pendergast 1994:13), creating a complex web of inter-regional connections over much of North America.

In the Northeast, marine shell was the preferred cross-cultural medium of exchange (Bradley and Childs 2007:304). An exotic material obtainable by most groups only through long-distance trade (Sempowski 1988:81), marine shell plays an important role in the study of cross-cultural exchange. The majority of marine shell traded is whelk (*busycon*) from the Atlantic Coast. Oyster and quahog from the northeast are also prominent (Snow 1994:67). The lightning whelk (*busycon sinistrum*) and the snow whelk (*busycon laeostomum*) were the most popular and were found from present-day New Jersey south to the Gulf of Mexico and from southern New Jersey to northern Virginia respectively (Encyclopaedia Britannica 2010; Johnson 2001:79). Other shells such as marginella occur only in the mid-Atlantic region (Engelbrecht 2003:137). The importance of marine shell trade to inter-tribal trade led the Dutch to begin manufacturing shell wampum in 1624 from whelk and quahog (Snow 1994:91).

European items were simply added to the intensive networks already created through Indigenous trade. While the date of the first direct trade between Indians and Europeans is unknown, European goods could have been introduced into native communities and the trading network in various ways apart from direct trade with Europeans. Pendergast (1994: 8-11) provides a few examples including shipwreck,

gift-giving, hostility, pirating, and missionary activity. Scholars also emphasize that the ways in which European goods were incorporated into Indigenous systems also varies. Distribution of goods can be affected by the way in which a group views material objects. Pendergast suggests that the acquisitiveness of the mid-Atlantic Algonquians and the non-acquisitiveness of the Iroquoians may have influenced distribution of European goods prior to substantial trading associated with the fur trade (1994:12).

While the dates are contested, it is generally accepted that the roots of the European-Amerindian trade in the Northeast lie in the fishing and whaling industries found within the gulf of the St. Lawrence (Innis 1962:9; Noble 2004:180; Turgeon 1990:82). Farther south, the half-hearted efforts of the Spanish to project influence over the Atlantic coastline, from the Chesapeake Bay south, led to several failed settlement attempts in the early sixteenth century (Kupperman 1984:15). It was not until the 1560s, when French Protestant settlements at Fort Caroline in Florida and Charlesfort in South Carolina threatened Spanish hegemony that Spain began to make serious colonization efforts on the North American continent (Kupperman 1984:15).

Past scholars have provided detailed timelines of the European presence in the northeast; what follows is a brief overview. Initial interaction between Europeans and Indigenous Americans was slight and impermanent (Quinn 1975:4). Early fur trade along the coast was limited and supplementary to the fishing industry for the first half of the sixteenth century (Innis 1962:9, 12). The Basques, Normans, French, and Bretons (from Brittany) were the earliest traders. Basques were among the first to engage with the Indians and were consistently trading by 1542 (Turgeon 1990:83). By the 1580s, joint fishing and trading ventures between Basques and Indians were common (Turgeon 1990:83). The Norman trade began around 1559 and was less intense than the Basque trade (Turgeon 1990:84). The Dutch first dealt with the

Mohawk in the 1580s while participating in the sack fish trade (Murray 1938:365-9). The French trade developed in the Gulf of the St. Lawrence in connection to dry fisheries and remained subsidiary to the fish trade until Champlain began more substantial trading in the early seventeenth century (Murray 1938:366).

By the end of the sixteenth century, Basque, French, and other northern European fishing boats were arriving with increasing frequency in the Gulf of the St. Lawrence and exploring the Atlantic Coast (Snow 1994:77). The first permanent French settlement was established in 1604 at Acadia, with the founding of Quebec following shortly after in 1608 (The Jesuit Relations 2000:9). The English began trading on the Chesapeake Bay in 1607 (Johnson 2001:79) while Jesuit missionaries arrived in the French colonies in 1625 (The Jesuit Relations 2000:6). From this brief timeline, it is obvious that continuous trading with Indigenous Americans did not begin until the last quarter of the sixteenth century while intensive trading did not begin until the early seventeenth century.

Despite the presence of Europeans, documentary records from this time are scarce. As trade with Indigenous Americans was often incidental to the lucrative fishing industry, strict records of such exchanges were rarely kept. It is assumed that the majority of interactions during this time took place either at a European-controlled area or in an unaffiliated area, thus allowing this period to be described in Fontana's terms as protohistoric rather than contact (Fontana 1965). Although not plentiful, written documents can illuminate sixteenth century American trade. Turgeon examined notary reports to better understand Basque, Norman, and Breton trade with area Indians, stating that such reports, as purely economic statements, were less subject to bias and prejudice than other historical documents (1990:81).

The earliest European objects to arrive on Indigenous sites that are visible archaeologically were often objects or pieces of copper or brass (Fitzgerald and

Ramsden 1988:153). An object must have a chemical composition of over 99.3% copper to be recognized as pure copper while brass and bronzes are intentional copper alloys. Brass contains zinc as a principal alloying element and is valued for its malleability and tensile strength while bronze is an alloy of copper and tin and is best suited for casting (Fitzgerald and Ramsden 1988:153-4). Copper played a major role in the early trade and eventually supplemented marine shell as the preferred cross-cultural medium of exchange (Bradley and Childs 2007:304).

The Basques were the main supplier of copper kettles during this early phase, as evidenced by the distinctive pure copper constitution of Basque kettles that are larger and heavier then other European kettles (Snow 1994:77; Turgeon 1990:84). Fitzgerald has noted a direct correlation between the intensification of the fur trade and the replacement of copper kettles with brass (1988:158-9). He claims that the protohistoric period may be defined by the use of pure copper that may represent the use of high-quality copper items prior to French industrialization (Fitzgerald and Ramsden 1988:159). Native copper is sometimes encountered archaeologically and can be confused with European copper. Spectrographic analysis, analysis of trace elements in the metal, is the best method to determine between the two.

Spirals and hoops, manufactured by Indigenous peoples from sheet copper or copper alloy occur almost exclusively on Iroquoian sites within the Susquehanna and adjacent river drainages (Bradley and Childs 2007:290). Recognized as an early contact period artifact, these items are found on sixteenth century sites throughout northeastern North America (Bradley and Childs 2007:209). They spread into Monongahela (western Pennsylvania) and the Niagara frontier areas in the late sixteenth century and are found as far away as Huronia and Fort Ancient (Ohio River Valley) by the seventeenth (Bradley and Childs 2007:292-3). As a result of their earliest known location (along the Susquehanna River) spirals and hoops have been

culturally associated with the Susquehannocks (Bradley and Childs 2007:292). Glass beads may also have been traded, though in much smaller quantities then subsequent periods (Turgeon 1990:86).

There were two main water-sources for European goods in the northeast: the St. Lawrence and the Susquehanna rivers. As this paper is on the Susquehannocks, the focus will be on the Susquehanna River drainage system. While undeniably part of an extensive system, the Susquehanna River and its' associated drainages provided a major conduit for European goods and marine shell from the Mid-Atlantic to central New York (Engelbrecht 2003:137). The Susquehanna was an obvious channel for the sixteenth century marine shell trade; the addition of European materials, particularly copper alloy products, to this system is quite logical and practically expected (Snow 1994:67).

Shells and brass spirals found on Seneca, Neutral, and Huron sites are believed to be a product of this trade (Bradley 2005:67; Snow 1994:67). While analyzing the shell assemblage of the Seneca, Sempowski (1988) states that most artifact indicators point to a southern source, undoubtedly referring to the Susquehanna (89-90). Even after the European trade began, much of the trade material, particularly marine shell and copper alloy objects, reaching the western Iroquoians is assumed to have originated in the Susquehanna region (Snow 1994:80). Bradley and Childes state that the presence of brass spirals and hoops, believed to be cultural indicators of the Susquehannocks and generally found only in great quantity along the Susquehanna River, in the interior northeast supports the argument that the earliest European goods were funneled through the Susquehanna Valley (2007:292).

When does the protohistoric period begin? While the dates presented earlier can be seen as very general guidelines, attempts to explicitly state a time frame for this period have been generally unsuccessful. The chronology presented through

documentary, oral, and archaeological evidence is often fragmentary, inconsistent, or contradictory (Grumet 1995:28), leading to contested chronological models. Dates given for the protohistoric period are often provided without an explicit definition of the term protohistoric, leading to conflicting models offered for a single site. The single most important issue handicapping protohistoric studies is this lack of a concrete definition. The second is the overly simplistic nature of the cultural-historical concept of time periods based on the out-dated archaeological need to categorize objects and peoples. Dates will vary between sites, thus (based on Fontana's definition) one site may be in the protohistoric period while a contemporaneous site merely five miles away is in the contact period. Consequently, it is practically impossible to create a general time-scale.

Regardless of this fact, and often without providing a definition of their terminology, several researchers have provided an interpretation of the protohistoric timeline. Noble (2004) claims that the protohistoric period in Quebec lasted from 1500-1610. Based on the presence or absence of key artifacts, he divides the period into early and late phases. The Early Protohistoric (1500-1550) is characterized by the presence of iron, brass, and copper as the main trading goods while the Late Protohistoric (1550-1610) witnesses the addition of glass beads and metal decorations (Noble 2004:180). Tuck (1971) claims that the protohistoric period for the Onondaga ended with the arrival of French Jesuits in the 1650s, a relatively late date. The majority of researchers do not provide a date range when describing protohistoric sites, preferring to simply label a site protohistoric without reference to a definition.

Susquehannock Protohistory

The majority of evidence gathered concerning the Susquehannocks points to an Iroquoian ancestry. Thus, although the evidence is not always supportive, researchers assume that the social organization, religious structures, and technological capabilities

of the Susquehannock were more or less identical to those of the New York Iroquoians (Kent 2001:7). The culture-historical approach, placing peoples into groups based on artifact assemblages, is the basis for Susquehannock archaeology.

Origin theories for the Susquehannocks mirror those of the New York Iroquoians with similar issues. Originally thought to be of southern origin, the Susquehannocks are now recognized by scholars as an offshoot of the New York Iroquois (Witthoft 1959:19). They were first recognized as a "primitive tribal unit" in southern New York state and northern Pennsylvania (I. Smith 1970:27). The question still remains as to whether the Susquehannocks left the Iroquoian homeland as culturally-recognized Susquehannocks, or whether they formed their group identity along the way. Some propose an in situ approach to the Susquehannocks, claiming local social and cultural growth (Witthoft 1959:21) among the inhabitants of the area north of the Wyoming Valley in Pennsylvania to the New York Finger Lakes (Crannell 1970:58). Others claim they are an example of relocation, moving either as refugees from Iroquois aggression or economic opportunists (Engelbrecht 2003:143; Kent 2001).

Kent (2001) provides another view on the issue. He asks whether the Susquehannocks were an example of a divergence or convergence with the Iroquois. A divergence implies a common ancestry and separate development while convergence refers to parallel development and diffusion of ideas (Kent 2001:15). He concludes that the Susquehannocks are an example of both processes, stating their potential common roots with the Cayuga-Seneca as evidenced through pottery styles and the evolutionary similarities between Susquehannock and Iroquoian pottery after the Susquehannock became a separate entity (Kent 2001:15-16). Origin research is no longer a subject of substantial scholarly focus and questions raised through such studies remain unanswered. In one of the more recent studies, Niemczycki (1984)

questions the proposed evolutionary relationship between the Cayuga and Seneca, consequently casting doubt on Susquehannock origin theories which utilize such relationships.

Although presently established as descendents of the New York Iroquois, it is unknown when, where, or from whom the Susquehannocks actually split. The majority of comments on this topic point towards a western Iroquoian, particularly Cayuga or Seneca, ancestry for the Susquehannock tribe. Some researchers believe that the Susquehannocks split occurred before the Seneca and Cayuga supposedly split, while others believe that the Cayuga were the definite predecessor of the Susquehannocks. Linguistic and ceramic evidence appear to substantiate such claims. The Susquehannock language is stated by Witthoft to be closest to Seneca/Cayuga dialects (1959:20) while Snow states that Cayuga linguistics exhibit a complex history of contacts, possibly denoting an early split (2007:28).

Ceramic seriation likewise suggests a Cayuga/Seneca ancestor for the Susquehannocks. Witthoft (1959) notes overlapping ceramic styles between the Cayuga and Susquehannock. With identical shape, finish, and decoration, the two types of pottery differ only in temper in the sixteenth century (Witthoft 1959:35). Witthoft suggests that the Susquehannocks split from the Cayuga around 1400, but their pottery only became distinct as they began their southward migration around 1550 (1959:39, 59; see also Rippeteau 1981:12-13). Crannell (1970) also agrees with a 1550 date for a schism between Susquehannock and Cayuga pottery (56) and claims a common ancestry (154). Kent (2001:117) likewise states that the Susquehannock split from the Cayuga based on ceramic seriation, noting the emergence of Proto-Susquehannock pottery from Richmond Mills Incised as the precise point of the cultural split.

The cultural-historical approach to Susquehannock archaeology is problematic. By equating the Susquehannocks with certain artifacts, researchers limit their interpretation of Susquehannock and other sites. Beisaw (2007:1) succinctly illustrates this fact by stating that uncritical acceptance of culture-history taxonomies masks variability and distorts interpretation of the past. Classifying a culture based on material culture necessarily downplays variation and innovation (Beisaw 2007:1). Hart and Brumbach (2003:737) likewise find fault with the culture-history approach to origins research claiming that such models represent a "straightjacket" to intellectual growth, restricting the questions asked to those that would only support the model. It is also virtually impossible to conduct such analysis for multi-component sites, a fact that bodes ill for the so-called Proto-Susquehannock sites, all of which are multi-component (Beisaw 2010:244). The possibility of heirlooming is also a significant risk to culture-history studies as such practices disrupt the spatial and temporal bounds of a particular cultural artifact (M. Smith 1987:27).

While problematic, the cultural-historical method of ceramic seriation is the primary method by which past researchers have studied and understood the Susquehannocks. Pottery is regarded as the only class of artifact capable of revealing cultural affiliations and chronological markers (Grumet 1995:45). Pottery analysis is the major means for tracing cultural development of oral societies (Kent 2001:110) even though it is recognized to have faults. Ceramic seriation must be used carefully and in combination with other diagnostic objects. Multiple indicators of cultural affiliation or site age must be present to circumvent the effects of sampling bias or heirlooming (Grumet 1995:46).

Three artifacts are used to denote Susquehannock presence or involvement at a site: marine shell objects, copper spirals, and shell-tempered pottery. As demonstrated previously, marine shell used as an integral part of cross-cultural exchange throughout

the pre-Columbian northeast contained some species found only along the Mid-Atlantic coast line. The clear path of marine shell up the Susquehanna River to central New York decisively shows that the Susquehanna was a major artery in this trade. As the acknowledged residents of this area, the Susquehannocks are believed to have been the main traders; thus marine shell found on sites can generally be assumed to represent the presence of or contact with Susquehannock peoples (Bradley and Childs 2007; Engelbrecht 2003; Johnson 2001; Sempowski 1988; Snow 1994). The occurrence of copper spirals is also used as an indication of Susquehannock presence. Manufactured by Indigenous people from European material, spirals occur in greatest volume on sites within the Susquehanna River drainage, leading researchers to culturally associate them with the Susquehannocks (Bradley and Childs 2007:290-292).

Shell-tempered pottery is perhaps the single most distinctive Susquehannock trait. It has been utilized by the majority of Susquehannock researchers as a diagnostic indicator of Susquehannock culture (Beisaw 2007:3). The Susquehannock pottery tradition is based in the proto-Iroquoian tradition, a pan-Iroquoian ceramic interaction sphere active throughout the fifteenth and sixteenth century that allowed Iroquoian peoples to share ideas and create a generally similar pottery style (Kent 2001:17). Proto-Susquehannock pottery grew out of this tradition. Generally similar to the Richmond Mill Incised pottery, Proto-Susquehannock pottery is a grit tempered ware quite similar in form and design to its successor, Schultz Incised. Proto-Susquehannock pottery is found in the area between Athens, Pennsylvania and Binghamton, New York (Grumet 1995:425).

The addition of crushed and roasted river mussel shell to Proto-Susquehannock pottery led to Schultz Incised pottery, differing from its ancestor only in temper and minor design patterns (Kent 2001:115,297). Shell-tempered pottery from this early

stage, labeled Early Schultz Incised, is found from Owego, New York to Wilkes-Barre, Pennsylvania, an area that largely overlaps with the Proto-Susquehannock vessels. The greatest concentration of both varieties is found around the Tioga Point area at the New York-Pennsylvania border (James Bradley, personal communication 2010).

The decision of the Susquehannocks to add crushed shell as temper has baffled researchers for decades. It is unknown exactly where this idea originated, though it is quite possible that the Susquehannocks obtained the knowledge from the Monongahela of western Pennsylvania (Kent 2001:115) with whom they were avid traders.[2] A part of the Chesapeake Bay whelk shell trade network (Johnson 2001:67), the Monongahela interaction with the Susquehannocks is clearly evident through artifact assemblages found at sites of both cultures (Beisaw 2007:53). The Monongahela people provided an important trade link between the Five Nations Iroquois, the Susquehannocks, and the Fort Ancient culture (Johnson 2001:77) and it is believed that Monongahela influences led to the addition of shell tempering in Shenks Ferry[3] pottery (Matlack 1992:69). The Susquehannocks could have received the idea either from the Shenks Ferry people, into whose lands they were migrating and trading, or directly from the Monongahela source.

Dating possible Susquehannock sites in the upper Susquehanna River valley region has proved challenging, particularly because of the lack of radiocarbon dates. Researchers have employed the direct historic approach to determine the cultural connection between the people who settled in this area and the lower Susquehanna

[2] The Monongahela were the dominant late prehistoric and protohistoric group in the upper Ohio River Valley of southwestern Pennsylvania and adjacent West Virginia, Maryland, and Ohio (Johnson 2001:67).

[3] The Shenks Ferry culture is described by Kent (2001) as a lower Susquehanna Valley Indigenous group appearing archaeologically around 1300 A.D. with possible ancestral roots in the Potomac Valley. The disappearance of Shenks Ferry culture appears to coincide with the introduction of the Susquehannocks into the region between 1550 and 1575 (Kent 2001: 19-21).

Valley Susquehannocks. European trade goods and ceramics are utilized as dating tools and compared to assemblages from other sites in the region. The Schultz site, the earliest southern Susquehanna Valley site, has been given a 1580s date based on the similarity of its material assemblage to the Seneca Cameron site (Witthoft 1959:22). However, European goods are scarce on Proto-Susquehannock sites, making this kind of dating by analogy difficult.

Kent (2001) proposes ten stages of Susquehannock history based on ceramic seriation, three of which apply to the study period. Before 1450, Kent sees the Susquehannocks as indistinguishable from the New York Iroquois. An arbitrary stage (arbitrary because no known sites have been located), the Susquehannocks at this time are, in every definition, Iroquois. Thus, in this common roots stage, the Susquehannock are not yet culturally distinct (Kent 2001:15).

Table 2.1. Ten Stages of Susquehannock Culture History (Kent 2001:18)

Stage	Date Range	Title
1	Prior to A.D 1450	Common Roots with Iroquois
2	1450-1525	Proto-Susquehannock
3	1525-1575	Early Schultz and Migration
4	1575-1600	Schultz
5	1600-1625	Washington Boro
6	1625-1645	Transitional
7	1645-1665	Strickler
8	1665-1680	Leibhart – defeat and turmoil
9	1680-1690	The Void
10	1690-1763	Conestoga and the other Indians

The second stage, from 1450 to 1525, is labeled Proto-Susquehannock. In this arbitrary stage (arbitrary because no single-component site has been identified) the Susquehannocks diverge from the Iroquois, a split demonstrated through departure from a common pottery tradition: Richmond Mills Incised. Proto-Susquehannock

pottery, seen by some as the earliest distinguishable Susquehannock cultural phase, developed out of the Richmond Mills Incised tradition as the Susquehannocks migrated south. Scattered sites along the New York – Pennsylvania border, particularly in Tioga (New York) and Bradford (Pennsylvania) counties, contain sherds of grit-tempered Proto-Susquehannock pottery (Kent 2001:15). Interestingly, no single-component Proto-Susquehannock site has been located in this region.

The third stage is labeled Early Schultz and takes place from 1525 to 1575. In this period, shell-tempering enters Susquehannock culture, transforming the grit-tempered Proto-Susquehannock ware into shell-tempered Early Schultz Incised. Different from Proto-Susquehannock ceramics by the choice of temper and from Schultz Incised by design and overall appearance, Early Schultz Incised pottery occurs in relatively the same geographic range as Proto-Susquehannock and Richmond Mills Incised pottery (Bradford County, Pennsylvania and Tioga County, New York) prior to 1575. The relocation of the Susquehannocks to the lower Susquehanna Valley occurred during this time and can be seen as an arbitrary substage (again, because few sites have been found along the Susquehanna River in central Pennsylvania) (Kent 2001:15-16).

Kent's temporal stages are generally accepted by most researchers, but are contested by some. Kent counters both Witthoft's (1959) and Jennings' (1978) claims that the Susquehannocks are not identifiable as a separate tribe until 1550, placing that moment twenty-five years earlier, at the latest. Sempowski (2007:200) questions Kent's date for the Schultz site and Susquehannock migration pointing to revisions in the Seneca chronology as her basis. She notes that Kent's use of Wray and Schoff's 1953 Seneca chronology is no longer relevant as said chronology has since been heavily revised, and instead proposes the use of glass bead horizons as a method of comparison dating the Schultz site. Similar to Kent's method, Sempowski instead

focuses on the presence of two temporally sensitive glass bead horizons, Indigo and White tubular and oval beads and polychrome beads, to match the Schultz site with the re-dated Cameron and Dutch Hollow sites, thus placing Schultz in a tentative 1590s through 1620 time range (2007:198). Unfortunately, such methods would be useless on the earlier, usually bead-less, Proto-Susquehannock sites.

Crannell (1970) questions the logic of dating Susquehannock sites through artifact comparisons with Seneca and other sites as such comparisons assume that the artifact chronology found on one site is applicable everywhere in the northeast (158). If the Seneca were in fact receiving these trade items from the Susquehannocks, wouldn't it be reasonable to assume that the Susquehannock sites with the same amount of items would be earlier, rather then contemporary? Whether or not this difference would be visible archaeologically, particularly on sites with poor documentation, is questionable.

Crannell also questions Kent's assertion that all of the Susquehannocks migrated south to the Schultz site. While Kent provides good evidence of extensive village expansion at Schultz, and demonstrates a lack of Susquehannock artifacts associated with trade goods in the upper Valley post-1575 (Kent 2001:117), Crannell is not convinced that the entire group migrated south (Crannell 1970:160). The main question that emerges from these arguments is, quite frankly, what makes the group Susquehannock? As the remainder of this thesis will show, the answer is extraordinarily complicated.

Proto-Susquehannock versus Protohistoric Susquehannock

A short, but necessary, digression is needed to examine yet another terminological issue. The terms *Proto-Susquehannock* and *Protohistoric Susquehannock* have been used interchangeably in the literature, often without explicit definition, to reference what seem to be two different concepts. No author has given a

definition of the term Proto-Susquehannock, while the only definition of Protohistoric has previously been given (Fontana 1965).

Literally, the term *Proto-Susquehannock* means early-Susquehannock. Does this mean that those labeled Proto-Susquehannock are culturally identifiable as Susquehannocks? The literature provides mixed answers. Kent (2001:15) labels Proto-Susquehannock pottery as the earliest distinguishable form of Susquehannock culture and many others seem to agree that Proto-Susquehannocks are Susquehannocks culturally. However, it is also stated, by Kent and others, that shell-tempered pottery is the principal cultural indicator of the Susquehannocks. Are Susquehannocks synonymous with shell-tempering? Is this why the grit-tempered proto-Susquehannock wares of the upper Susquehanna Valley are labeled "proto"? And if so, why is the prefix proto used instead of pre? Does this mean that, because their pottery is grit-tempered, they are not considered full Susquehannocks?

The term *protohistoric Susquehannock* is equally perplexing. Literally meaning early-historic Susquehannocks, the term implies that the group in reference is fully Susquehannock culturally. Thus, protohistoric Susquehannock does not carry the same inferences as the term Proto-Susquehannock. These two terms are used almost interchangeably without reference to definition, although they seem to refer to two different concepts. The term *Proto-Susquehannock*, is used to exclusively reference a particular culture or cultural attributes and is utilized by at least fifteen area researchers (Crannell 1970; Grumet 1995; Kent 1980a; Kent 1980b; Kent 2001; Lenig 1960; Lipe 1976; Lucy 1971; Lucy and Vanderpoel 1979; Lucy and McCracken 1985; Lucy 1991; McCracken and Lucy 1989; I. Smith 1970; I. Smith 1977; and Witthoft n.d). The term *protohistoric Susquehannock* is less clear. Although, by definition it should reference temporality, it is used by four authors in reference to time only (Noble 2004; Wilcox and Masse 1981; Lipe 1976; Reinhart 2000), one in reference to

culture only (Cobb and Nassaney1995), and six use the term ambiguously (Beisaw 2006; Brashler 1987; Jennings 1978; McCann 1962; Sempowski 2007; Stewart 1973). Only one author (Lipe 1976) uses both terms.

It is obvious that a formal definition of these two terms must be stated and adhered to. Unfortunately, doing so would likely cement the culture-history categories Indigenous groups are forced into, an act with multiple problems of its own, particularly where the Native American Graves Protection and Repatriation Act (NAGPRA) is concerned (http://www.nps.gov/history/nagpra/). Researchers need to determine what exactly constitutes Susquehannock culture, or an academic version of it, without creating an exclusive mold that would fail to represent the variety of the Upper Susquehanna Valley sites.

Upper Susquehanna Valley

The upper Susquehanna Valley, including the north branch in New York, the Tioga Point Region along the New York–Pennsylvania border, and parts of the West Branch in north-central Pennsylvania, is the location of dozens of small, often multi-component, sites which have been traced to the Susquehannock Indians (Figure 2.1). The Susquehannock presence on the North Branch begins south of the city of Binghamton. It is believed that there was no Susquehannock, nor perhaps any substantial Iroquoian, settlement of the region immediately north of Binghamton (Rippeteau 1981:128,135). The West Branch, which reaches within miles of the Ohio River Valley (Kent 2001:307), was apparently utilized though never settled by the Susquehannocks (Kent 2001:310).

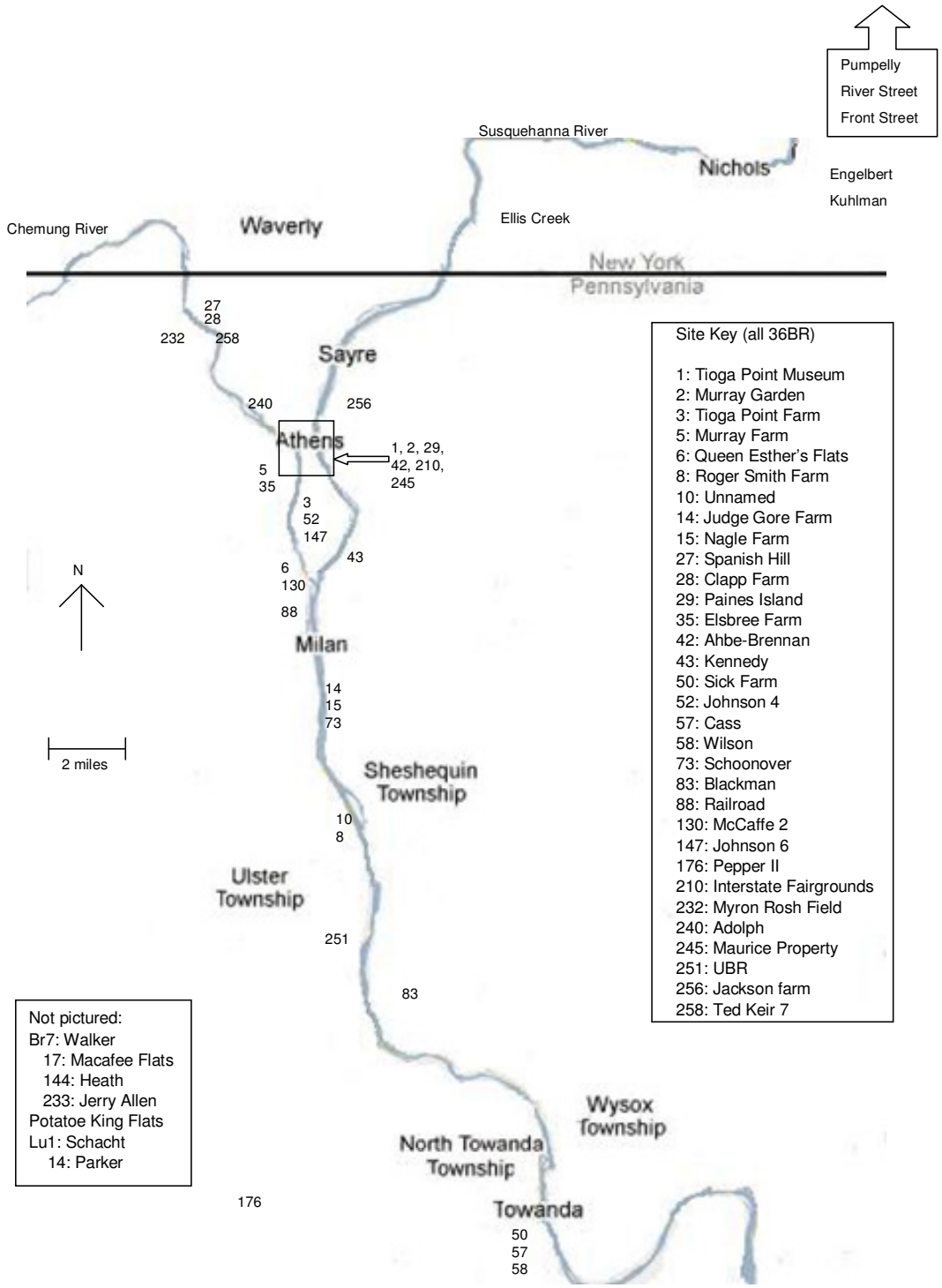

Figure 2.1. Map of possible Proto-Susquehannock sites in the Upper Susquehanna River Valley

The Susquehannocks settled in this region for an indeterminate amount of time, although previous dates suggest less then a century of occupation, after which they began a swift migration south. Kent claims that the founding of the Schultz site in Lancaster County, Pennsylvania can be dated to 1575. Although others contest these claims, it is obvious that there were several waves of migrations south (Kent 2001:117). The majority of Upper Susquehanna Valley Susquehannock sites contain few European trade items and, because of this dearth, can be dated to the sixteenth century. Researchers are unsure why the Susquehannocks moved over three hundred kilometers down the Susquehanna in such a short time period (the typical community move of Iroquoian groups at the time being 2.0 to 3.4 miles per move [Engelbrecht 2003:101]) hypothesizing that they were either pulled (by economic opportunities) or pushed (by Iroquoian aggression) (Bradley 2005:98).

I have identified forty-five possible Susquehannock sites in the Upper Susquehanna River Valley. From Owego, New York, the Pumpelly Creek, River Street, and Front Street sites will be presented. The Engelbert (SUBi-300), Ellis Creek (30Ti24), Potatoe King Flats, and Kuhlman/Kahlman sites are found in Nichols, New York. Smithsonian identification numbers are not available for the majority of New York sites (with the exception of Ellis Creek).

The Tioga Point area, at the confluence of the Chemung and Susquehanna and straddling both New York and Pennsylvania, contains the greatest concentration of Proto-Susquehannock sites in the Susquehanna Valley. The sites to be described in this area include (all in Pennsylvania state nomenclature 36Br--): Tioga Point Museum (1), Murray Garden (2), Tioga Point Farm (3), Murray Farm (5), Queen Esther's Flats (6), Walker (7), Roger Smith Farm (8), Unnamed (10), Judge Gore Farm (14), Nagle Farm (15), Macafee Flats (17), Spanish Hill (27), Clapp Farm (28), Paines Island (29), Elsbree Farm (35), Thurston Farm (5/41), Ahbe-Brennan (42), Kennedy (43), Sick

Farm (50), Johnson 4 (52), Cass (57), Wilson (58), Schoonover (73), Blackman (83), Railroad (88), McCaffe 2 (130), Heath (144), Johnson 6 (147), Pepper II (176), Interstate Fairgrounds (210), Myron Rosh Field (232), Adolph (240), Maurice Property (245), UBR (251), Jackson Farm (256), and Ted Keir 7 (258).

The Schacht (36Lu1) and Parker (36Lu14) sites, found in Luzerne County, Pennsylvania, will be briefly covered.

CHAPTER 3

PROTO-SUSQUEHANNOCK SITES

Excavation History

The Upper Susquehanna River Valley region, generally running from Binghamton, New York to just south of Bradford County, Pennsylvania, has withstood centuries of archaeological exploration, both professional and amateur. Witthoft (n.d.) succinctly illustrates the current state of archaeology in the Upper Susquehanna Valley with the statement "The great difficulty with most excavations...conducted in the region [Tioga Point] is that they have been hit and run operations, not part of any overall program, with rapid excavation and too little precise dissection of features and levels and too little careful observation of unspectacular evidence" (n.p.).

Although the area is known to many as the first recognized territory inhabited by the Susquehannocks, few professional excavations have been conducted. Warren K. Moorehead conducted the first professional exploration of Upper Susquehanna Valley sites in 1916. Unfortunately, the records left by Moorehead are subpar, particularly in comparison with modern reports. Published twenty-two years after the Susquehanna River Expedition, Moorehead's short report contains little of archaeological significance. Written in a narrative style, the report contains very little information on the sites explored by the group, no doubt complicated by the decades separating the Expedition and the Report and the consequent loss of notes, photos, and maps. Moorehead's description of individual sites is often completed within a paragraph of text, with the self-proclaimed most important site of the journey (Murray Farm – 36Br5) receiving a meager one and a half pages of text. Nevertheless, the Expedition, as the first major archaeological investigation in the region, does provide crucial information on area sites.

While the ostensible purpose of the Susquehanna River Expedition was to record Indian sites along the Susquehanna (Custer 1986:52; Twigg 2009b:2), the actual purpose was to collect artifacts for the new Museum of the American Indian of the Heye Foundation in New York City (Custer 1986:52; Twigg 2009b:1). Although Moorehead would deny that the journey was for the sole purpose of filling exhibits during the field work, he clearly stated in his report "This expedition was conducted in the interests of and sponsored by the Museum of the American Indian, Heye Foundation, New York City" (Moorehead 1938:5). Moorehead's image in modern archaeology is controversial. Although seen by many as the 'Dean of Archaeology,' others, particularly those who have studied this particular Expedition, claim he was nothing more than an archaeological dilettante (Rippeteau 1981:127) and glorified treasure hunter (Twigg 2009b:1).

Personal letters (obtained from the Robert S. Peabody Museum of Archaeology, Phillips Academy, Andover, Massachusetts) exchanged between Moorehead and others seem to favor the latter interpretation. Moorehead, in correspondence with Heye, was obviously trying to cover the economic nature of his Expedition:

> You will observe...that I have not mentioned you or your museum. This is purposely done as I do not want to stir up these people [New York State Museum at Albany] by making them think you have put a lot of money into this and that lots will be taken out for the Heye Museum (Moorehead to Heye, May 11, 1916).

In another letter, Heye writes: "I shall look forward to having some good specimens, particularly in the pottery line, in the near future" (Heye to Moorehead, May 29, 1916). Others in the Expedition, particularly George P. Donehoo, wished to receive a share of the loot:

> There is so much in your state [Pennsylvania] that those that we would take for the New York gentleman [Heye] who is paying would not cause trouble. I will agree to give you... a good collection provided the gentleman in New York does not object (Moorehead to Donehoo, March 20, 1916).

Moorehead encountered numerous problems on his journey; those concerning professional archaeologists at the New York State Museum in Albany and Louise Welles Murray of the Tioga Point Museum in Athens are the most interesting. Officials at the New York State Museum (NYSM) were rightfully suspicious of Moorehead's Expedition. As noted previously in a letter to Heye (May 11, 1916), Moorehead made every attempt to convince NYSM that the Expedition was nothing more than a scientific venture, hiding his association with Heye. Unconvinced, NYSM assigned Arthur C. Parker to accompany the Expedition while in New York to watch over Moorehead. Moorehead, obviously not thrilled about his new chaperone, wrote to Heye: "If I have to compromise, will make side trips with Parker, while Skinner and the men dig hard. You may be sure we shall 'side-step' as much as possible, if we have to take Parker the first three to four weeks" (Moorehead to Heye May 11, 1916).

Moorehead also accused the NYSM of attempts to sabotage his mission by telling local historians, collectors, and landowners not to allow him to dig. "We did not go into the Unadilla region, or do much work on the upper river. This was largely because the authorities at Albany seemed to think it was their territory" (Moorehead to Chas van Doesen, June 7, 1916). Apparently, Albany's influence spread beyond state borders as Moorehead encountered opposition in Pennsylvania as well, writing to Skinner: "Albany has no rights in Pennsylvania. Ask Donehoo to use his commission authority and block Albany or local interference. Put up a strong fight" (Moorehead to Skinner, June 10, 1916).

Louise Welles Murray was a pivotal figure in Tioga Point archaeology and history. She first became interested in archaeology when workmen unearthed burials on her property (the Murray Garden site, 36Br2). Her curiosity in area archaeology sparked, Murray became a key figure in Athens archaeology, founding the Tioga Point Museum in the early twentieth century. It was at Murray's insistence that Moorehead's Expedition came to the Tioga Point region and discovered the most productive site of their journey, the Murray Farm (36Br5).

Although anxious to entertain Moorehead, Murray was not willing to let the Expedition simply violate Tioga Point. Moorehead apparently saw Murray as little more than an avocational nuisance, writing to Alanson Skinner (his second in command): "You had better jolly her [Mrs. Murray] up so she will not oppose us" (Moorehead to Skinner, June 5, 1916) to which Skinner replied: "I have Mrs. Murray properly in hand. There is nothing to worry over, as we have the stuff" (Skinner to Moorehead, June 12, 1916). The lack of any published work by Moorehead led Murray to publish in 1921 two articles in the *Pennsylvania Archaeologist* on Tioga Point archaeology. Exceedingly more informative than Moorehead's Report, Murray's articles are a seminal point in Bradford County archaeology.

On May 15 or 16, 1916, the nine to eleven men of the Moorehead Expedition left Otsego, New York, headed downriver to Havre de Grace, Maryland at the mouth of the Susquehanna River (Moorehead 1938:15; Twigg 2009b:1). Led by Moorehead and Alanson Skinner, the Expedition was to examine sites of consequence located through correspondence with collectors throughout the Susquehanna River Valley. Aided by local professional and avocational archaeologists, the crew was able to generally excavate an astonishing two hundred test pits of unknown size per day, spaced about fifty to one hundred yards apart. If no significant objects were found, the

definition of a 'significant object' is unknown, they would move to another site (Twigg 2009b:2).

Focusing primarily on burials (Moorehead 1938:10), the Expedition spent little time at each site, often only a day or two. The main location method was to question local collectors and to examine private and institutional collections. As the Expedition occurred during the summer planting months, many sites were under cultivation and the group could not obtain permission to excavate. Often, locals refused to speak to the group or refused permission to dig (Moorehead 1938:16). The group worked the first 150 miles relatively thoroughly, then quickly passed through the remainder. Reaching Harrisburg, Pennsylvania, on July 18th -- a mere two months after leaving Otsego -- Moorehead pushed through to Maryland, arriving by the end of July (Moorehead 1938:87). Although quick, Moorehead claims that his Expedition was meant to be nothing more than a reconnaissance and that three to four field seasons would be needed to successfully uncover all sites in the region (Moorehead 1938:10).

It is difficult to know exactly where Moorehead and his men excavated as there is very little detail in his report. Any notes on sites typically do not mention the site name itself, just the name of the nearest town. In general, Moorehead found little Iroquoian material culture on the North Branch of the Susquehanna River (Otsego to Binghamton), and hypothesized that the area was a buffer zone between the Five Nations Iroquois and the Susquehannocks (Moorehead 1938:31). Moorehead spent the majority of his time (roughly three weeks) in the area between Binghamton and the Upper Wyoming Valley, particularly the Tioga Point region (Custer 1986:52; Moorehead 1938:68).

The named sites that he excavated in this region were Spanish Hill (36Br27), Murray Farm (36Br5), Lower Queen Esther's Flats, Lower Sheshequin, Sugar Creek, Towanda Creek, and Wysox (Moorehead 1938:50-87). Spanish Hill and Murray Farm

were further excavated by others and will be described shortly. Lower Queen Esther's Flats was described as a large, historic Algonquian area on the west bank of the Susquehanna after Tioga Point (Moorehead 1938:69). Lower Sheshequin, opposite of Ulster, was deemed an Andaste (Susquehannock) settlement through its pottery (Moorehead 1938:70), while Wysox was described as an Andaste settlement and burial ground (Moorehead 1938:71). Sugar Creek was a fortified hilltop on the west bank, three miles above Towanda that Moorehead attributes to the Andaste (1938:70) while Towanda Creek was a burial site near the mouth of its namesake (1938:70).

Several other surveys have been conducted in the area. James Griffin, funded by the Tioga Point Museum, undertook excavations in 1931 at four area sites: Ahbe-Brennan (36Br42), Thurston Farm (36Br5/41), Murray Farm (36Br5), and Spanish Hill (36Br27) (Kent 2001:301). Griffin's work was meant to determine which sites warranted more extensive excavation (Griffin n.d.a:37) and to generate local interest in area archaeology (Griffin 1931:3).

The Susquehanna River Archaeological Survey, led by Ira F. Smith III of the Pennsylvania State Museum, was meant to find and identify Clemson Island sites in eastern Pennsylvania. Spanning four years (1972-3, 1975-6), the group surveyed stream terraces, conducted surface collections, and interviewed owners, amateurs, and collectors (I. Smith 1977:27). In 1975, the survey, attempting to determine the relationship of sites in Bradford and Elk counties to Susquehannock occupations, excavated the Blackman (36Br83), Kennedy (36Br43), and McKinley Earthwork (36El17) sites (I. Smith 1977:29).

In 2003, A.D. Marble and Company, an environmental planning firm operating throughout the mid-Atlantic, in collaboration with the Pennsylvania Department of Transportation, completed a research program focused on the compilation of area site information in the municipalities of Athens, Litchfield, Ridgebury, Sayre, Sheshequin,

Smithfield, South Waverly, and Ulster. Begun to mitigate the effects of the Athens bridge replacement, the project collected information on area sites from scattered institutions and local individuals to create a unified database of all known precontact archaeological settlements in the area (A.D. Marble and Company 2003:1-22).

When analyzing upper Susquehanna archaeology, particularly that in the Tioga Point area, one cannot ignore the presence and influence of local collectors or avocational archaeologists. In this case, the term collector is defined as any person without professional archaeological training *and* employment. The Tioga Point area is unique in that collecting is not just a hobby practiced by a small portion of the population, it is a cultural phenomenon. Regardless of age, economic standing, or education, collecting is a treasured local past-time. Murray claims that collecting began around the mid nineteenth century, with its origins in intensive plow agriculture in the floodplains and river erosion (A.D. Marble and Company 2003:26). Most collectors surface hunt only, though there are several who have dug.

The rise of local prominent collectors such as Louise Welles Murray, those who wished to do more than covet artifacts, led to a redirection of collecting in the area (A.D. Marble and Company 2003:30). Many collectors have kept records of the provenience of their finds, though not nearly detailed enough for an archaeological analysis. Some have collections containing thousands of items. The collection of Ted Keir of Athens, Pennsylvania, is acknowledged as the largest in private hands in the area while others such as the Gillete, Rowe, and Vanderpoel collections are also notable in Tioga Point archaeology. As this area has been largely ignored by professionals in the past decades, the activity of collectors in part fills the void created by their absence.

The sites examined below do not constitute all of the archaeological sites in the Upper Susquehanna Valley region; a comprehensive inventory would have been

beyond the scope and intent of this thesis. Instead, only those labeled *protohistoric* or *Proto-Susquehannock*, or those that contain artifacts popularly known to be cultural indicators of the Susquehannock (such as shell-tempered pottery, copper spirals, or marine shell) are examined. The majority of these sites were excavated prior to 1970, many by collectors or 'professionals' such as Moorehead in search of burials, others by archaeologists with too little time and funding. As such, detailed field notes and artifact lists are rare and cannot be considered. See Appendix for a reference list by site. The work of A.D. Marble and Company (2003) was instrumental in the identification of several of the sites; others were located through published and unpublished research and personal communication with researchers and collectors. Time constraints led me to focus more intently on the area that produced the majority of Proto-Susquehannock sites; thus research conducted in New York State institutions on New York sites is not as extensive as that conducted on the Pennsylvania sites.

Several problems were encountered while researching sites in this area. First and foremost, the unusually long and prosperous history of collecting in the region has left many sites practically indecipherable. While some collectors have kept good field notes (some better than the 'professionals'), others simply collect and hoard, taking the past for themselves and preventing full study of a site. Another issue that must be noted is the inconsistency in site names. Some sites are known by several different names, by an official and local name, or just by a state-assigned site number. With most, it is easy to discover whether two sites names actually refer to a single site, but with others, particularly those reported by collectors, it is near impossible. If there is name confusion, all names will be presented. Finally, all of the sites in this region are multi-component. There have been no single-component Proto-Susquehannock sites found in the region, a fact which has undoubtedly made interpretation of such sites and analysis of the Proto-Susquehannocks remarkably difficult. Despite these issues, there

is much to learn about the Proto-Susquehannocks in the Upper Susquehanna River Valley.

Sites in Tioga County, New York

Moorehead (1938) noted the paucity of late Woodland or Iroquoian evidence north of Binghamton claiming that aggression between two "superpowers" (Susquehannocks and Iroquois) led to the creation of a buffer zone in the area. Funk (1993) also cites aggression as a possible cause of area depopulation, as well as other possibilities such as disadvantageous agricultural conditions, population nucleation in other regions, and the rapid economic and suburban growth of the area in the twentieth century as reasons why few sites have been found in the region (209)

Pumpelly Creek. Located on the west side of the confluence of Pumpelly Creek and the Susquehanna River near a sewage treatment plant (Dolores Elliot, personal communication 2010), the Pumpelly Creek site was collected by Oren (Orin?) White in May 1968. White salvaged seven burials from the eroded creek bed, unearthing at least one spiral, two long copper tubes, a mercenaria disk, and a lot of decorated/incised shell. The spiral, found on the side of a skull, was roughly 46x42mm in round section and was rolled from a sheet. The two copper tubes were similarly manufactured, were 176mm and 179mm long, and were found on an individual's chest (James Bradley, personal communication 2010).

River Street. The River Street site was observed by William Lipe in 1965 during the construction of a power substation. It is unknown whether Lipe excavated the site. Several collectors were active, however, uncovering a few burials. In 1920 collectors unearthed an iron celt with a shell-tempered Susquehannock pot. This vessel, noted as a Schultz Incised variant as its collar is smaller than usual (James Bradley, personal communication 2010), may be the same pot described by Crannell (1970:146) as a Schultz Incised variant similar to Strickler Cordmarked.

60 Front Street. Very little is known of this site as it was not professionally excavated. James Bradley notes that four copper spirals, rolled from a sheet, were found in 1914 in the backyard of H. Austin Clark (James Bradley, personal communication 2010).

Engelbert (SUBi-300). The Engelbert site is easily the most important Susquehannock site in New York state. The site encompassed a glacial knoll roughly 650'x600', the flat top of which measured roughly 400'x400' (Beisaw 2007:7) and which rose about twenty to thirty feet above the flood plain (Reinhart 2000:1). Engelbert was discovered in 1967 as the knoll underwent gravel mining for the construction of New York State Route 17. Salvage work commenced from 1967-1968 (Reinhart 2000:1) under the direction of William Lipe and Dolores Elliot (Reinhart 2000:3). As this was a salvage operation, and the gravel workers had already mechanically removed the topsoil, the surface of the knoll was rescraped with a bulldozer, removing roughly 1 foot of topsoil to reveal prehistoric features (Semowich 1980/1:19). Although worked for over a year, the archaeologists at Engelbert were often working only feet ahead of contractors equipment, necessarily sacrificing detailed notes for preservation (Caister 2007:4).

Archaeological remains were found over the entire top of the knoll (Lipe 1976:206), though the exact number differs by author. Beisaw writes that over 600 pit features were found as well as 130 burials containing 180 individuals (2010:246). most of which were interred prior to 1550 (Dolores Elliot, personal communication 2010). Reinhart (2000) simply states that over 600 features were excavated, while Caister (2007) claims over 1,200 features (including fire pits, storage pits, post-molds, and burials) along with 140 Late Woodland burials were discovered (4). Lipe is generally consistent with Beisaw, claiming around 600 pit features, 135 burials, and 25-30 individuals represented by scattered bone (1976:205). Although the site was

well-staffed (over five hundred volunteers [Lipe 1976:206]), Beisaw (2010) claims that between five hundred and six hundred features were lost to mining while Elliot states that around one third of significant archaeological features were lost due to construction (Lipe 1976:205; Elliot and Lipe 1970:n.p.).

Engelbert, like many sites in the region, is a multi-component site. Occupied intermittently for over 4,500 years, the site hosts Archaic, Late Woodland, Protohistoric, and Historic components. The Archaic component consists of a small hearth and related artifacts (Reinhart 2000:4) as well as an abundance of stone net weights and projectile points (Elliot and Lipe 1970:n.p.) roughly dated to the Lamoka phase (2,500 B.C.) (Reinhart 2000:4). The majority of the site (87 percent [Beisaw 2010:246]) consists of objects related to the Late Woodland or Owasco phase, datable from 1100 to 1400 or 1500 A.D. (Elliot and Lipe 1970:n.p.; Versaggi, Stahl, Knapp, and Loren 1996). This period saw intense usage of the knoll, represented by structural features, storage pits, burials, and other habitation debris (Elliot and Lipe 1970:n.p.).

The protohistoric component is represented by a Susquehannock cemetery, located in a small area on the northern part of the site (Elliot and Lipe 1970:n.p.). Dated to roughly 1450 to 1600 by the presence of shell tempered pottery and copper artifacts (Elliot and Lipe 1970:n.p.; Versaggi et.al. 1996:n.p.), the designation of this site as Proto-Susquehannock is based entirely on this burial component. Three historic components were also found including a nineteenth century house (or inn), farm buildings (possibly a twentieth century butchery facility), and a cemetery (Elliot and Lipe 1970:n.p.; Reinhart 2000:4; Semowich 1980/1:19; Versaggi et.al. 1996:n.p.). The historic cemetery has been left intact; everything else was destroyed by October 1968 (Reinhart 2000:3).

The Susquehannock component at Engelbert is noted as the largest concentration of clearly identifiable Susquehannock remains in the Upper

Susquehanna Valley (Beisaw 2008:1), the cemetery contains seventeen burials, ten of which are attributable to the Susquehannocks (Beisaw 2010:248). Five single and five double burials, equaling fifteen individuals, were found in a variety of graves differing in form as well as content (Beisaw 2007:3). Of interest is that seven of these ten burials were found in an unnatural soil lens, leading researchers to propose that the area was manufactured by the Susquehannocks for burials (Crannell 1970:37).

Dating of the Susquehannock cemetery has proved tricky. Some of the grave goods found with the burials include copper ornaments, small numbers of glass beads, and shell-tempered pottery (Schultz Incised), leading researchers to assign a 1550 date to the area (Dunbar and Ruhl 1974:2; Lipe 1976:211; Stewart 1973:4). Only one feature has provided a radiocarbon date (Feature 716), though at 1460 +/- 100 years, many believe it to be too early (Beisaw 2007:144).

However, one feature (Feature 715) is thought to be later than the others as its shape is different and it contained a much larger quantity of trade metal (43 beads, 2 spirals, 2 rings, and 1 tube) (Beisaw 2007:147; Crannell 1970:37). This burial puts Witthoft's migration theory for the Susquehannocks into question. Witthoft states that the Susquehannocks were in southern New York in 1525 and in southern Pennsylvania by 1575. By comparing the objects found in Feature 715 with other Susquehannock burials, the closest comparison is to the Ibaugh site, a Washington-Boro era cemetery dating to the 1600-1625 (Kent 2001:21), making this feature definitely later than 1550 and likely dating to the seventeenth century (Beisaw 2008:1; Beisaw 2010:247-50). Beisaw (2008) has proposed that the unexpectedly late date could result from a unique reburial practice among later Susquehannocks.

Important artifacts found within the Susquehannock cemetery include various copper objects, glass beads, and shell tempered pottery. Fifty-eight of the sixty copper items found in this area are definitely of European manufacture and were found within

four burials (described as three Susquehannock and one Monongahela (Beisaw 2007:130; Dunbar and Ruhl 1974:2). Out of these four burials, one (Feature 715) contained ninety percent of the copper goods while sixty percent of the Susquehannock graves did not contain any copper (Beisaw 2007:130). Bradley (personal communication 2010) examined four of the copper spirals and concluded that two were brass and two were smelted copper, supporting a relatively later trading date via Fitzgerald and Ramsden (1988). Four disintegrated glass beads, dated from 1550 to 1575, were found in a single grave (Crannell 1970:37).

The presence of shell-tempered pottery at Engelbert plays an important role in the analysis of its cultural affiliation. Graves were designated as Susquehannock based on the presence or absence of this distinctive pottery, regardless of the fact that grit-tempered varieties were found in almost every grave alongside the shell-tempered sherds (Beisaw 2007:141). Sixteen shell-tempered vessels were recorded, although the identification of some sherds differs by researcher. Elliot (1970) notes that fourteen of the vessels were stylistically similar to Early Schultz Incised pottery (n.p.) while Stewart (1973) claims that only thirteen are Early Schultz Incised (9), a change from her earlier work (Crannell 1970) where she claimed that nine of the pots were indisputably Susquehannock, two were possibly Susquehannock, one was Monongahela Plain, two were aberrant Monongahela Cordmarked, one was Wellsburg Simple Stamped, and the remaining pot was a mystery (142-146). Furthermore, shell-tempered pottery was not found exclusively in the Susquehannock area (Beisaw 2007:132).

The role of shell-tempered pottery within the Susquehannock cemetery has received much comment. As this pottery type was only found in burials, it is conjectured that this Early Schultz Incised ware was initially used only for ceremonial purposes. This hypothesis seemed to hold merit when shell-tempered pottery was

contrasted with grit-tempered varieties, which were found in occupation as well as burial contexts (Beisaw 2007:78-9).

However, recent research on the burial practices in the Susquehannock cemetery area (Beisaw 2008) seems to show that the Susquehannocks were practicing what Beisaw terms 'reburial'. Proposed by Beisaw (2010) as a way to connect present to past, the excavation and re-use of graves of previous cultures can be seen in fifty percent of the Susquehannock burials (5 burials, 10 individuals). As the Susquehannock component appears to be composed of only the cemetery, it is highly likely that the grit-tempered wares in the burials were from an earlier time while the shell-tempered wares were interred more recently with the Susquehannock individuals. A related issue concerns whether the shell-tempered wares were locally manufactured. Crannell states that they were (1970:34), yet she does not provide evidence for her assertions. If the shell-tempered wares were locally made, would this imply occupation? Would a group returning to this special site, after travelling for days, spend time manufacturing new pottery?

Although an undeniably important site, Engelbert presents several problems to researchers. As this was a salvage operation undertaken by hundreds of people, there is great variety in the quality of the field notes (Beisaw 2008:2) and site maps (Reinhart 2000:4). The site information suffers from a lack of contextual integrity and a loss of spatial context that has hindered post-excavation research (Beisaw 2006:2; Reinhart 2004:4). Furthermore, much information has been lost in the decades since excavation, particularly because little has been published on the site, no doubt a result of the quality of the field notes (Reinhart 2000:4).

Ellis Creek (30Ti24). Located only one hundred yards north of the New York – Pennsylvania border in Tioga County, this site sites atop a glacial knoll south of Ellis Creek on the west side of the Susquehanna River (James Bradley, personal

communication 2010). Excavations in 1921 and 1948 uncovered four burials containing ten individuals, all bundled and containing shell-tempered pottery. Seventy-six ground quahog shell bead blanks as well as Castle Creek and early Iroquoian grit-tempered pottery were also found (Lucy 1950:56-58).

Kuhlman/Kahlman. It is unclear whether these two sites are synonymous. Beisaw (2007) states that the Kuhlman site, one-half mile east of Engelbert, contained two graves and two pits excavated by the property owners. One of the graves was a double burial with one shell and one grit tempered vessel included (similar to the Engelbert Susquehannock burials), as well as copper beads, rings, spirals, and jangles (139). Crannell (1970) describes the vessels found within the two burials as Munsee Incised and Schultz Incised, providing evidence for contact between the Susquehannock and Munsee (151). Bradley (personal communication 2010) places the Kahlman site in roughly the same geographical position and states that two Schultz Incised vessels were found.

Potatoe King Flats. Located near Litchfield Station, New York on the Susquehanna River, this site, and its unique spelling, was only mentioned in passing by Witthoft (n.d.:n.p.) as a multi-component site with surface-found ceramics ranging from 1000 B.C. to 1550 Susquehannock.

Sites in Bradford County, Pennsylvania

Tioga Point Museum (36Br1). Discovered during construction for the Spaulding Memorial Library in 1895, the Tioga Point Museum site encompasses the area within and around the current Library and Tioga Point Museum (A.D. Marble and Company 2003:78). This site has been collected only; no professional excavations have been undertaken in the area. Described as a village with two burial areas, the site included flexed burials, fire pits, shell fragments (James Bradley, personal communication 2010), various lithics, as well as three distinct pottery types: Owasco

series, Schultz Incised, and Richmond Mills Incised (A.D. Marble and Company 2003:78; Murray 1921:188). Historic European objects such as kaolin pipes, ceramics, and knives were also found (A.D. Marble and Company 2003:78). The multi-component site has been labeled Late Woodland, Protohistoric, and Historic (A.D. Marble and Company 2003:78) and its artifacts are currently housed in the Tioga Point Museum.

Murray Garden (36Br2). The Murray Garden site was discovered in 1882 on the property of the Murray family home when construction for a drainage pipe uncovered an Indian burial ground. The site was initially excavated by Mrs. Murray and local avocationals in 1882 and further excavated from 1883 to 1895 by the Wyoming Valley Historic and Geological Society (A.D. Marble and Company 2003:79; Tioga Point Museum, Athens, Pennsylvania). The Wyoming Valley excavations focused on a plot eighty feet by twenty to thirty feet, roughly twenty feet from the river bank (James Bradley, personal communication 2010).

Containing both a burial and occupation component (A.D. Marble and Company 2003:79), burials at the site have received the most attention. By 1896, twenty-nine graves had been uncovered, but the exact number of individuals is obscure as some of the burials were double, containing twenty-eight pots as well as other artifacts, particularly ornamentation. Based on the pottery, the site has been interpreted as an Andaste cemetery. Furthermore, the orientation of the burials is quite interesting as they seem to be radiate from, in a circular pattern, one particular grave (Murray 1921:192). The documents are not clear on exactly what was found in this particular burial, yet it was interpreted as the grave of a young chief upon examination (Murray 1921:192).

Artifacts found at the site are primarily of Indigenous manufacture, though European trade items are present. Most artifacts are currently housed in the Tioga

Point and Pennsylvania State Museums, though some have undoubtedly been lost. Forty-three lithic items, including pestles, grinding and pitted stones, gorgets, pendants, stone tools, and projectile points were uncovered (A.D. Marble and Company 2003:79). Shell heaps containing the remains of fresh water shells have been found along with a marine shell gorget and turtle shell rattles (Bradley, personal communication 2010; Tioga Point Museum, Athens, Pennsylvania).

Ceramics found at the site include four examples of Seneca Barbed Collar and Notched, two Richmond Mills Incised, five Ithaca Linear (which some label grit-tempered Schultz Incised), three Shenks Ferry, seven Susquehannock shell-tempered Schultz Incised, one Owasco Herringbone, one Owasco Corded Horizontal, and six Proto-Susquehannock (A.D. Marble and Company 2003; Bradley, personal communication 2010 – percentages). The Susquehannock varieties are the most prevalent with the Schultz Incised constituting 24.1 percent of the total while the Proto-Susquehannock sherds equal 20.7 percent. European items found at the site include a copper coil and green trade beads (A.D. Marble and Company 2003:79)

Interestingly, face effigies were found on some of the pottery rims (Murray 1921:192). Twigg claims that the pottery effigies are quite similar to those found on Washington Boro pottery and asserts that the Murray Garden site should be dated from 1600 to 1625 in accordance with this similarity (Twigg 2009a:5). Bradley disagrees, claiming that the effigy faces are more in the form of Munsee or Onondaga effigies than Susquehannock and claims that these objects are examples of inter-cultural connections (James Bradley, personal communication 2010; Bradley 2005:97). Kent simply maintains that more research is needed on the pots (Kent 2001:298).

Based on the pottery and assorted funerary objects found, the Murray Garden site has been affiliated with the Late Woodland, Protohistoric, and Contact periods, with a possible Historic component as well (A.D. Marble and Company 2003:79). A

contemporaneous, or slightly earlier, relationship with the Schultz site is probable as the Murray Garden artifacts closely resemble those found at Schultz, though in smaller quantities. Bradley and Lucy (James Bradley, personal communication 2010) interpret the Murray Garden site as proto-Susquehannock with Seneca traits. Some see the Murray Garden as an ideal prototype to the lower Susquehanna Valley sites, seemingly supporting the concept of a northern origin for the Susquehannocks (Tioga Point Museum, Athens, Pennsylvania).

Tioga Point Farm (36Br3). This site number designates the general peninsular landform created by the confluence of the Chemung and Susquehanna Rivers from the southern tip to the narrow neck at Athens, Pennsylvania (A.D. Marble and Company 2003:79). The Tioga Point Farm site includes six distinct and separately numbered sites (Kent 2001:305; Lucy 1991:16), none of which were available documentarily. The area is of strategic importance near several Indigenous trails. The Tioga Portage, described in 1774 by Samuel Harris, extends along the west side of Queen Esther's Flats, crosses the Chemung at the Tioga Point neck, then follows the eastern side of the Chemung along the Forbidden Path to the Alleghany River and the western side of the Susquehanna River to Onondaga. The Warriors Path ran from Athens northward along the Susquehanna (A.D. Marble and Company 2003:79-80; Lucy and Vanderpoel 1979:1).

This 162 hectare expanse of alluvial farmland (Lucy 1991:1) has been extensively collected in the past centuries. Excavations in 1983 were conducted by Lucy (1991) through the Pennsylvania State Museum to determine the amount of previous promiscuous digging, uncovering flexed and extended burials, as well as fire pits, refuse pits, and shell-filled pits (Bradley, personal communication 2010). Located in a fertile and strategic area, the site has been inhabited intermittedly for centuries (Lucy and Vanderpoel 1979:1). Thousands of known artifacts have been excavated

here, and doubtless many more are in private hands. Lithics include utilitarian and non-utilitarian examples such as pipes, pestles, gorgets, and pendants as well as a variety of projectile points (A.D. Marble and Company 2003:80). Over thirty different varieties of Indigenous pottery were identified including seven sherds of Susquehannock (shell-tempered but apparently not Schultz Incised), fifty-six sherds of Richmond Mills Incised, sixteen sherds of Proto-Susquehannock pottery (A.D. Marble and Company 2003:80; James Bradley, personal communication 2010 [quantities]).

A relatively large amount of historic items were also reported, spanning several centuries. Brass tinklers, spirals, and possibly glass trade beads date to an earlier period while a cannonball, musket balls, gunflints, a sword, silver cross, King George I medal, and 1779 United States Army button are probably from a later period (A.D. Marble and Company 2003:80). Based on the artifacts, the site has been labeled multi-component, containing elements from the Late Archaic, Transitional, Early Woodland, Middle Woodland, Late Woodland, Protohistoric, and Historic periods (A.D. Marble and Company 2003:80). Lucy claims that although the site was inhabited almost continually for over a millennium, the heaviest occupation was Owasco (Lucy 1991:1). Collections from the Tioga Point site(s) can be found at the Tioga Point and Pennsylvania State Museums as well as in the personal collections of Ted Keir, Charles Lucy, and many other local residents (A.D. Marble and Company 2003:80-1).

Murray Farm (36Br5). The Murray Farm Site, also referred to as Upper Queen Esther's Flats, is located on the west side of the Chemung, west of the Tioga Point neck (A.D. Marble and Company 2003:82). The multi-component site includes Middle and Late Archaic, Late Woodland, protohistoric, and Contact period components in the form of open habitation sites and a cemetery (A.D. Marble and Company 2003:82). Labeled as the most productive site of his Expedition, Moorehead excavated

the site in 1916 from June 8th until late June (possibly the 21st) (Moorehead 1938:43-4). Although plagued by constant rain, the group managed to uncover thirty-eight burials containing fifty-seven individuals. Most artifacts found were labeled archaic Iroquoian, although one European steel "scalping knife" was identified. As befits the multi-component nature of the site, the burial methods used were diverse featuring flexed and bundle burials, oriented in all directions (Moorehead 1938:44). In 1931, Griffin re-opened the site and unearthed at least five burials in poor condition containing Iroquoian grit-tempered pottery (Griffin n.d.a:16-24).

Artifacts found at the Murray Farm site include various Indigenous items such as lithics, pottery, and bone tools (A.D. Marble and Company 2003:82). Eight pottery vessels constituting five different ceramic types were identified: Schultz Incised, Seneca-like, Richmond Mills Incised, Fort Ancient-like, and Levanna Cord on Cord, while three different types of Indigenous pipes were recognized: Trumpet Pipes, a Janus-Faced Pipe, and a Beaver Effigy Pipe (A.D. Marble and Company 2003:82; Bradley, personal communication 2010). European trade items including an iron knife, trade copper, tubular copper beads, and rings were also uncovered (A.D. Marble and Company 2003:82).

Two sites given separate names though often regarded as part of the Murray Farm site are the Thurston Farm site and the Murray Cemetery site. The Thurston Farm site is located next to the Murray Farm site and sometimes given the same number. Documentation of the Thurston Farm site is confusing as it is variously labeled 36Br5 or 36Br41. The site is acknowledged to be the apple orchard immediately next to the Murray Farm site, yet some reports place 36Br41 in the southern portion of Bradford county, miles away from Athens. Regardless of semantics, the Thurston Farm site was also excavated by Griffin in 1931. Six pits were found in this area containing seven sherds of a grit or stone-tempered pottery. Griffin

was not able to accurately date this area (Griffin n.d.a:25-31). Moorehead is the only researcher to mention the Murray Cemetery site. Mentioned within the same paragraph as the Murray Farm excavations, Moorehead also refers to the site as Upper Queen Esther's Flats. Moorehead noted that copper beads were found on this area (Moorehead 1938:50).

Noted by Bradley as being artifactually similar to the Engelbert site, the Murray Farm site has not produced any obvious Susquehannock remains (Bradley, personal communication 2010). Artifacts from the Murray Farm site are scattered (many went with Moorehead's group) but a few items can be found at the Tioga Point Museum (A.D. Marble and Company 2003:82).

Queen Esther's Flats (36Br6). Also known as Green's Landing, the Queen Esther's Flats site is located on the west bank at the confluence of the Chemung and Susquehanna Rivers, directly south of Tioga Point (A.D. Marble and Company 2003:83). A multi-component site spanning the Late Archaic, Early and Late Woodland, Protohistoric, and Historic periods, the area represents an occupation zone (A.D. Marble and Company 2003:83). Excavated by Moorehead in 1916, the artifacts found at the site are practically identical to those of the Murray Garden site with Andaste pottery found by the Expedition as well as several bundle burials, one with a deer antler rank on the cranium, the origin of the 'horned Indian' myth popular in the area during the early twentieth century (Murray 1921:203-4). Griffin likewise excavated the area in 1931 (A.D. Marble and Company 2003:83).

Various Indigenous and a few European objects were found at the site. Various types of lithics including Susquehanna Broad points and Levanna and Madison points were unearthed as well as hammerstones and other stone tools (A.D. Marble and Company 2003:83). European clay pipes, musket balls, and brass spirals were also present. One burial provided an interesting mix of European goods. A spiral so-called

'Basque Earring' was found near the ear underneath a metal bar extending from across the ear to the top of the jaw. Also from this burial were bits of woven cloth preserved by the copper verdigris and Schultz Incised pottery sherds (Bradley, personal communication 2010).

At least twenty different ceramic varieties were identified including: Clemson Island/Princess Point series, Point Peninsula Corded, Sick Incised, Levanna Corded collar, Vinette I, Susquehannock, Bainbridge Linear and Notched Lip, Oak Hill Corded, Wickham Corded Punctate, Proto-Susquehannock, Clemson Island, Shenks Ferry, Munsee Incised, Castle Creek Punctate, Iroquois Linear, Levanna Cord-on-Cord, Owasco, Carpenter Brook Cord-on-Cord, and Sackett Series (A.D. Marble and Company 2003:83). Artifacts from Queen Esther's Flats are currently housed at the Tioga Point and Pennsylvania State Museums as well as in the personal collections of Charles Lucy and others (A.D. Marble and Company 2003:83).

Walker (36Br7). Paul Scott, a student at the University of Pennsylvania and/or Harvard, collected the Walker site, located on the West Bank of the Chemung, in the 1930's. Described by Scott as a multi-component site spanning the entire Archaic (Early, Middle, and Late), Woodland (Early, Middle, and Late) periods as well as the Protohistoric and Contact period, the Walker site is interpreted as an occupation site. Numerous lithics, particularly from the Archaic periods, have been identified as well as several varieties of ceramics from the Kelso, Sackett, and Kipp Island tradition. From the documentary evidence, it is unclear why this site was labeled protohistoric. Collections are currently held at the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:84).

Roger Smith Farm (36Br8). Located on the west bank of the Susquehanna River north of Ulster, the Roger Smith farm site is found in an agricultural field between a railroad and riverside channel. Collected by Ted Keir, the site has present

numerous lithics as well as Owasco, Levanna Cord-on-Cord, and Proto-Susquehannock pottery. Labeled as an open habitation site, the Roger Smith Farm has been assigned to the Middle to Late Archaic, Late Woodland, and Protohistoric Periods. Artifacts from this site are currently held at the Pennsylvania State Museum and in the personal collections of Ted Keir (A.D. Marble and Company 2003:85).

Unnamed Site (36Br10). Locally known as the Scott Farm or the Van Dyke Farm, though officially unnamed, Paul Scott collected from this area on the west bank of the Susquehanna, thought to be close to the Roger Smith Farm site. Through surface collecting and/or subsurface digging, Scott uncovered an unknown amount of lithics and ceramic sherds in this area. The ceramic sherds represent the Owasco, Richmond Mills Incised, Susquehannock, and Shenks Ferry traditions. These ceramic traditions, along with various lithic traditions including Brewerton, Lamoka, and Jack's Reef points from the Archaic period, and Madison, Levanna points from the Woodland period, represent a multi-component site inhabited from the Middle to Late Archaic, through the entire Woodland period, and into the Protohistoric era. Artifacts from the site can be found at the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:86).

Judge Gore Farm Site (36Br14). Situated near the mouth of Spaulding Creek in Sheshequin along the east bank of the Susquehanna, the Judge Gore Farm site contains Middle to Late Archaic, Late Woodland, and Protohistoric elements. Tested in 1931 by Griffin (how extensively is unknown), the site contained a variety of objects including steatite bowls, both utilitarian and non-utilitarian worked stone, and Owasco and Proto-Susquehannock ceramics. The collections are currently housed at the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:87).

Nagle Farm Site (36Br15). Also called the Sheshequin site, the Nagle Farm site is located west of Spaulding Creek. This multi-component occupation site was excavated in 1947 by the Andaste Chapter of the Society for Pennsylvania Archaeology (A.D. Marble and Company 2003:88). There is little documentary evidence of this excavation, although Witthoft may have been referring to the site in a 1959 and undated piece when referencing a site in the general area excavated in 1946 by the Society for Pennsylvania Archaeology. Witthoft (n.d.) states that the site is protohistoric Susquehannock and Transitional, and one of the largest sites by the 1950's to demonstrate first indirect contact with Europeans. Around eighty pits were excavated, all of which showed evidence of previous excavation by collectors (n.p.), and seventeen graves were found (Witthoft 1959:31). Artifacts found include lithics, a Schultz Incised sherd (A.D. Marble and Company 2003:88), and a tubular brass bead within a burial (Witthoft n.d.:n.p.). The site has been labeled Late Archaic, Late Woodland, Protohistoric, and Historic (A.D. Marble and Company 2003:88) and collections may be found at the Tioga Point and Pennsylvania State Museums as well as the Bradford County Historical Society (A.D. Marble and Company 2003:88-9).

Macafee Flats (36Br17). Louise Welles Murray lists this site in her 1921 publication. Believed to be a multi-component "Algonquian" and "Andaste' occupation site (Murray 1921:214), no other information on this site is known (although it might be synonymous with the McCaffe 2 site [36Br130] on Queen Esther's Flats).

Spanish Hill (36Br27). Undeniably one of the most contested sites in the area, Spanish Hill is located one-half mile east of the Chemung River, directly south of the New York border. Its temporal position is, as of now, undetermined, though it is believed to have a Late Woodland component (A.D. Marble and Company 2003:94). At nine-hundred feet long, one-hundred seventy-three yards wide and one hundred

feet high, Spanish Hill is an excellent naturally defensive hilltop (Griffin n.d.b:n.p). Spanish Hill plays a key role in one of early America's documentary mysteries and local Bradford County legends as it is believed by some to be the site of Champlain's Carantouan.

In 1615, Etienne Brûlé was sent by Champlain to the Carantouannais village of Carantouan to ask for aid in a French battle against the Huron. It is believed that Brûlé went to the fortified hilltop village, gathered an army, and marched against the Huron village, a mere three day journey. Late to the battle, a series of unfortunate events befell Brûlé, who failed to report back to Champlain for three years, finally returning in 1618. Many researchers caution against taking the story proposed by Brûlé literally. Rippeteau (1981) notes that it is unclear where Brûlé actually travelled (132-3); indeed, Champlain's first map noting the location of Carantouan in 1632 placed it upon the Delaware River (Murray 1931:21) although it was redrawn on the Susquehanna in the next edition (Funk 1993:85). Hunter (1959) questions whether the events reported by Brûlé actually occurred. Stating that Brûlé may have concocted the story to cover his failure and three-year absence, Hunter asserts that there is no way to check its accuracy (1959:10-11).

In the late nineteenth century, General John S. Clark determined, without a doubt, that Champlain's Carantouan was Spanish Hill. Describing the Carantouannais as a Huron-speaking tribe located at the head of the Lackawaxen (Murray 1931:9), Clark takes Champlain's map and Brûlé's story at face value, stating that Brule travelled to the Susquehanna from the Chemung (Funk 1993:85). By estimating a typical travelling distance of twenty-five to thirty miles per day, Clark claims that Spanish Hill is exactly a three-day journey from the Huron Fort (Murray 1931:21) and claims that Carantouan "which I [Clark] identify, as located beyond any possibly question on the hill near Waverly..." (Murray 1931:22) is on Spanish Hill. The

historically documented, though currently absent, presence of earthen fortifications on the Hill seemed to further support Clark's conclusion (Twigg 2005:27). Determined to leave nothing unexplained, Clark further places the other two villages located on Champlain's map as Carantouannais villages: one on Sugar Creek near north Towanda and another near Elmira (Murray 1931:22).

Several methodological questions arise from Clark's conclusions that he does not successfully address. First, the location of the Huron fort from which Carantouan was a three day journey is not disclosed. One must assume that Clark knew where this is, but he provides little information or evidence of its location. The second problem relates to another assumption: travel distance and method. Clark estimates twenty-five to thirty travel miles a day. How did he arrive at this number? Is this walking or by water? This lack of detailed information makes his conclusions impossible to replicate, lending them little credibility. The final problem with Clark's conclusions is that he does not give explicit reasons for locating Carantouan on Spanish Hill besides the belief that 'it fits'. He does not mention studies of other sites in the area or the fact that Champlain originally placed the village on the Delaware, rather than the Susquehanna. It seems as if Clark began his study with the preconceived notion that Spanish Hill was Carantouan and simply looked for evidence to support his claim, rather than objectively examining all possibilities.

Although questionable, Clark's conclusions have found a receptive audience. Louise Welles Murray particularly believed in Clark's work, working to perpetuate his findings, even sending Moorehead's expedition to Spanish Hill. Unfortunately for Mrs. Murray, Moorehead found nothing of significance at the site and concluded that it was not the fabled Carantouan, leading Murray to state the following in her 1921 article:

As to the already published reports of other work by the Expedition in this Valley, while

> much more time was spent here than at any other point, we do not consider that sufficient investigation was made to lightly set aside the work of former students of the early tribes along the Susquehanna. We believe that the careful study of the Andaste and the surveys made by Reverend David Craft and General John S. Clark should not be considered as local traditions until thorough scientific investigations in fair weather can be made (206).

Murray, and other local collectors, held strongly to their beliefs and put forth several valid observations. The first concerns the fact that the hill has been heavily hunted by collectors for over two-hundred years. Intensive plow agriculture on the hilltop has fed the appetites of dozens, possibly hundreds, leading to the loss of an unknown amount of artifacts throughout the years. Lithics and potsherds, Algonquian and Iroquoian, have been reported (Murray 1921:290) from the area, leading many to believe that there was some form of occupation. Another piece of evidence to support Clark's theory is documentary evidence of a fortified hilltop provided by travelers (Griffin n.d.b:n.p.).

The third critique by Mrs. Murray concerns the thoroughness of Moorehead's investigations at the site. The Expedition, led by Alanson Skinner while Moorehead was in Andover, spent only two days at the site. In those two days, a few members of the Expedition (the others left at the productive Murray Farm site) along with local boy scouts, dug over four-hundred test pits along the edge of the hill (McCracken 1985:41). Although lithics and pottery were uncovered, the group determined that there was no evidence of heavy occupation and, as their primary goal was burials, decided that the site could not be the legendary Carantouan (Moorehead 1938:68-9). This can hardly be called a thorough investigation. In two days, both of which suffered

from bad weather, a group of mostly amateur volunteers dug over four hundred pits of unknown depth, along the very edge of the hill (mature crops covered the interior). Without focusing on the obvious problem of the excavation methods, it is quite possible that the test pits never went beyond the heavily plowed and hunted topsoil. Furthermore, the location of the pits, although necessary, is not ideal for locating evidence of habitation. It is obvious that one cannot rely on Moorehead's conclusions on Spanish Hill as his methodology was undeniably flawed.

Moorehead's conclusions obviously distressed Mrs. Murray. Sending him and his associates numerous letters urging him to re-evaluate his evidence; Murray tried everything in her power to bring archaeologists back to Spanish Hill. The locals needed no convincing, with L.D. Shoemaker writing a letter to Murray clearly stating that Moorehead's conclusions were wrong (Twigg 2005:29) while, on the other hand, Moorehead wrote to A.C. Parker on December 15, 1916 denouncing Mrs. Murray and claiming that she was 'obsessed' with the region and overemphasized its importance (Robert S. Peabody Museum of Archaeology, Phillips Academy, Andover, Massachusetts).

In 1931, Griffin excavated on Spanish Hill with the intent to answer questions on the location of an ossuary found in the nineteenth century and the nature of the earth rim around the hill top. Excavating along the terrace on the west and north side and surface surveying around the rim, Griffin's excavations were, like Moorehead's, unproductive (Griffin n.d.b:n.p.). Griffin dug eight trenches and numerous test pits around the edge of the hill and the only evidence of Indian occupation encountered was a small grit-tempered rim sherd in Trench Three (Griffin n.d.a: 31-7; Griffin n.d.b:n.p.; Griffin 1931:n.p.). Griffin concluded that there were no definite traces of Indian occupation on the hilltop, yet claimed that this could easily be a result of intense cultivation and collector activity (Griffin n.d.b:n.p.). He states "That Spanish

Hill was used by the Indians is amply proven by the amount of material picked from its surface in the past" (Griffin n.d.b:n.p.).

Today, the legend of Spanish Hill remains strong in the Tioga Point area (Kent 2001:301). While local history claims the Hill's importance, archaeological testing has not yet confirmed rumors of a protohistoric palisaded village, whether or not that village is the legendary Carantouan (A.D. Marble and Company 2003:94). The main issue preventing solid interpretation of the site is the lack of evidence or context for collected artifacts. Several excavations at the site, including the 1916 Moorehead visit, the 1931 Griffin digs, and a 1974 shovel-testing by Kings College, have produced very few artifacts (A.D. Marble and Company 2003:94). On the other hand, local collectors (Shoemaker, Land, Cowles, etc) have found abundant evidence to indicate a multi-component site (Griffin n.d.b:n.p.). Most of these artifacts remain in private hands, although the Tioga Point Museum holds a few, as well as the majority of documents on Spanish Hill (A.D. Marble and Company 2003:94).

Richard McCracken (1985) attempted to squash the Spanish Hill/Carantouan rumor by refuting Clark's claims, stating that his evidence is unclear and accusing him of creating a powerful local legend that has prevented objectivity (40). McCracken cites the failure of all past professionals to find evidence of habitation along with the popular view that the Susquehannocks left the area by 1575 (Witthoft 1959; Kent 2001). As of 1983, over five-hundred test pits have been dug on the Hill and have produced little artifactual material (Tioga Point Museum, Athens, Pennsylvania). Furthermore, McCracken states that the absence of trade goods in any abundance in Bradford County indicates that the sites in this region simply were not occupied during the early seventeenth century (1985:48).

While McCracken makes some very valid points, the previously mentioned criticisms from Louise Welles Murray must also be considered. Although over five

hundred test pits have been dug on the hill, the vast majority of these have been dug on the hill's edge as all excavations have taken place during the summer planting season (Figure 3.1) It seems as if the Griffin and Moorehead excavations overlapped in some instances, yet there was no note by Griffin of finding previously disturbed soil. Furthermore, no details on the test pits have been revealed; it is not known how deep they went or whether they even cleared off all of the topsoil. In addition, the obvious success of collectors should indicate that *something* occurred on the hill. The location and defensive characteristics of the site is too advantageous to think that it was never utilized. Although little has been found on the hill, the minimal scope of the excavations may in fact show that absence of evidence does not necessarily indicate evidence of absence.

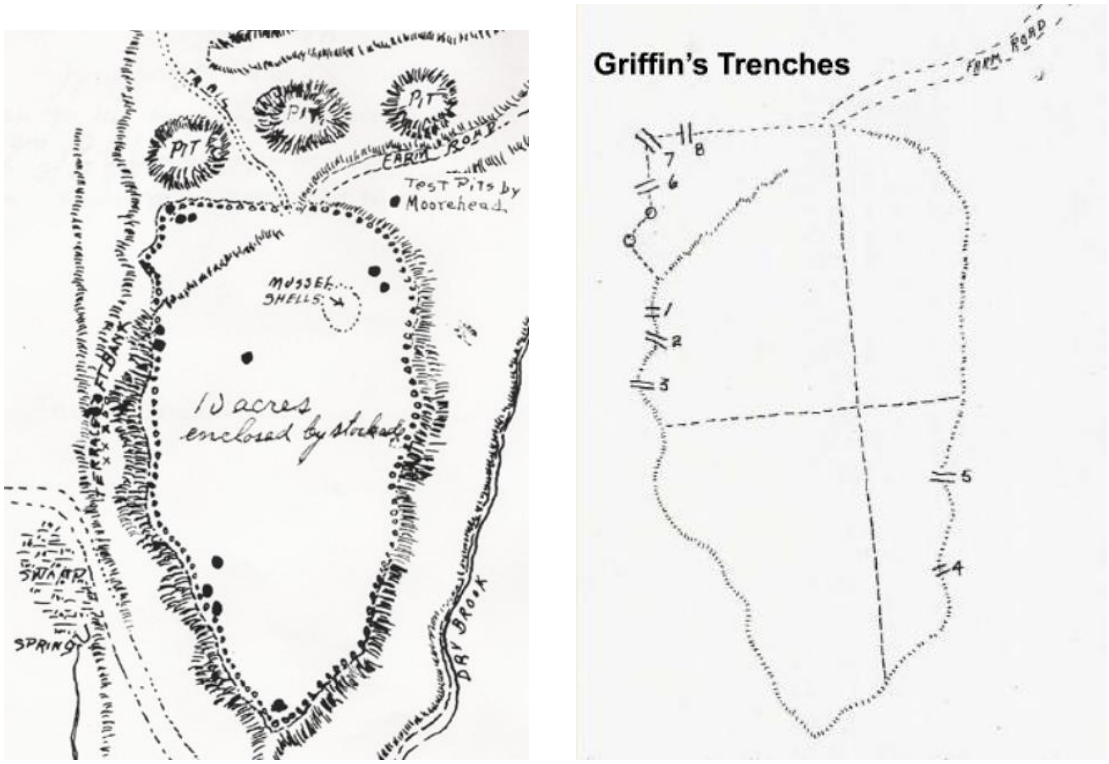

Figure 3.1. Excavation maps of Spanish Hill. From the Moorehead Expedition 1916 (left) and the Griffin excavations 1931 (right) showing location of excavations. Notice that practically all work done on edges of site. From Susquehanna River Archaeological Center, courtesy of Deb Twigg.

Further investigation of Spanish Hill is crucial. There are three essential questions that must be answered about Spanish Hill: the first concerns its cultural affiliation and asks whether the site is Susquehannock. Its placement in Bradford County within a mile of other identified proto-Susquehannock sites makes it quite possible that the site was utilized by proto-Susquehannock people, whether or not it was an occupation site. The second question: is Spanish Hill the legendary Carantouan? Diagnostic artifacts from the first quarter of the seventeen century along with the presence of domestic refuse such as bone, charcoal, and pottery sherds could provide occupational clues that may validate Brûlé's story. More investigation needs to be conducted on this question if the truth is ever to be uncovered, whether or not that truth validates the local legend. Finally, if both of the previous questions are answered in the affirmative, does that mean that the Susquehannocks were the Carantouannais mentioned by Champlain? While objectivity on this site is undeniably difficult, there are too many problems present in past excavations of the area to simply dismiss Spanish Hill as a site, regardless of whether or not it is Carantouan.

Clapp Farm (36Br28). The Clapp Farm site has been referred to by many names in past literature including Effigy Hearth Site, Liddiard Farm site, Class Farm site, South of Spanish Hill site, and has also been confused with Spanish Hill itself (A.D. Marble and Company 2003:95). Located immediately south of Spanish Hill, the Clapp Farm site has provided what Spanish Hill refused to yield: evidence of Indigenous occupation. Noted as a Middle to Late Archaic, Early to Late Woodland, and Protohistoric multi-component site, the area offers evidence of a occupation through postholes, subsurface remains of a wooden palisade, and a large hearth feature (A.D. Marble and Company 2003:95). The site was excavated in 1933, 1935, and

1939 by Ellsworth Cowles and M.L. Gore and in 1967 by the Pennsylvania Historic and Museum Commission (A.D. Marble and Company 2003:95).

Artifacts uncovered include lithics, steatite bowls, carved bones, clay pipes (Indigenous), and Munsee Incised, Iroquois Linear, and Sackett Series ceramics. A miniature double-mouthed pot is one of the most interesting objects found, though very little has been written on it (A.D. Marble and Company 2003:95). Based on these artifacts and the presence of a small rectangular stockade, Kent has labeled the site to be primarily Owasco in origin (Kent 2001:301). Collections from the site may be viewed a the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:96).

Paines Island (36Br29). Located on an Island in the Susquehanna River east of the neck of Tioga Point, the Paines Island site has never been professionally excavated. Collected by Leroy Vanderpoel, the site has produced some chipped stone tools and debitage as well as Schultz Incised and Susquehannock ceramics. Labeled as a protohistoric site, very little is known about the island and the location of the objects collected from its surface is currently unknown (A.D. Marble and Company 2003:96). If the location reported is correct, this site is probably on one of two large islands across from the Murray Garden site. Personal communication with Donald Hunt of the Tioga Point Museum reveals that there was a site on one of those islands, though Mr. Hunt could not recall the name.

Elsbree Farm (36Br35). Located on the west side of the Chemung, opposite an island west of Athens, the Elsbree Farm site is another multi-component site spanning the Mid to Late Archaic, Mid to Late Woodland, and Protohistoric periods. In 1931 Griffin spent a day at the site examining seven burials that had been uncovered in the construction of a silo by the site owners. Various projectile point types were found including Susquehanna Broadspear, Brewerton, Jack's Reef, Lamoka, and Madison.

Proto-Susquehannock ceramics were also uncovered. Although it is not stated, it is inferred that these objects were found in the disturbed burials. Collections from the Elsbree Farm can be found at the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:98).

Ahbe-Brennan (36Br42). The Ahbe-Brennan site is located near the Murray Garden site in Athens, between the Chemung and Susquehanna Rivers. Containing an occupation and burial component, the multi-component site has been labeled Late Woodland, Protohistoric, Contact-Historic, Historic, and 1700-1800 (A.D. Marble and Company 2003:100). Griffin excavated the site in 1931, uncovering twelve pits and two burials, both of which provide evidence of close European interaction. The first burial was of an adult male, buried with a kaolin pipe near his mandible and an unidentified metal tool on his ribcage. The second, found in a crude wood coffin, was determined osteologically to be an Indigenous sub-adult (Griffin n.d.a:3-16).

Artifacts found at the site represented more intensive Indigenous-European contact than other area sites. Levanna and Beekman points were represented as well as worked bone, shell beads and pendants and Owasco, Levanna Corded Collar, Clemson Island, and Wickham Incised ceramics (A.D. Marble and Company 2003:100-1). European items found include a kaolin trade pipe, blue seed beads, and glass dishes (A.D. Marble and Company AD 2003:100-1). Ceramic temper analysis of forty-one sherds from the site at the Ceramic Repository for the Eastern United States at the University of Michigan determined that the vast majority of sherds were grit tempered while only one was sand tempered (Griffin n.d.a:3-16). Kent (2001) believes the burials represent individuals from the eighteenth century Indian town of Tioga (272). Griffin, as well as Cowles and Skinner (Griffin n.d.a:3-16), claim the sites represents an Algonquian occupation while the Tioga Point Museum concurs, labeling the site historic Delaware (Tioga Point Museum, Athens, Pennsylvania). Collections can be

found at the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:101). The two individuals were apparently reburied in a ceremony on July 1, 1933 (Tioga Point Museum, Athens, Pennsylvania), although the newspaper article referencing the event could possibly be referring to another site.

Kennedy (36Br43). Situated on the east bank of the Susquehanna, across from the Tioga Point Farm site (36Br3), the Kennedy site is another multi-component site spanning time periods from the Middle to Late Archaic, Middle to Late Woodland, to the Protohistoric period (A.D. Marble and Company 2003:101). The site has been extensively collected and excavated by two professional groups: the Kings College field school led by Professor Leslie Delaney in 1973 and the Pennsylvania Historic and Museum Commission in 1975.

The Kings College field school excavated the area in November of 1973 (Casterline and Sokash 1974:n.p.), uncovering an area 80' by 80' and exposing burial and occupation components. The remains of three adults (two females) were found in one single and one double burial (it was not noted which individuals were in which burial). Burial one contained shell-tempered pottery and a brass spiral earring fragment while burial two contained shell-tempered pottery and a small glass bead. A 65' by 25' longhouse (Kent 2001:305; Lucy n.d.:n.p.) was also found, claimed by Keir to represent Owasco occupation (Ted Keir, personal communication 2010) although the objects found in the burials give the site a tentative 1550 date (Casterline and Sokash 1974:n.p.).

Lucy notes that a Susquehannock burial was found 9.8 meters west of the center of the longhouse. This intriguing burial contained one-half of a Schultz Incised shell-tempered vessel as well as two rolled pieces of copper metal underneath the skull. Lucy states that the metal, which is four centimeters long and 2.7 centimeters in diameter, can be dated to 1550 and labels the burial intrusive, even though it appears

contemporaneous with the other two burials (Lucy n.d:n.p.). Perhaps most interestingly, quills of five feathers were found preserved by the copper tubes near the rear of the skull, leading to interpretation of the copper and quills as a relatively elaborate headdress (Ted Keir personal communication 2010).

Ira F. Smith III and James Herbstritt of the Pennsylvania Historical and Museum Commission excavated the Kennedy site in 1975. They uncovered thirty identifiable rim and neck sherds, 63.3 percent of which represented the Carpenter Brook tradition, 13.3 percent were Wickham Corded Punctate and Levanna Cord-on-Cord, 10 percent were labeled miscellaneous later sherds, and two sherds were noted as intrusive Richmond Mills Incised (Lucy n.d.:n.p.). Based on these ceramic types, they labeled the site primarily early Owasco (Lucy n.d.:n.p.). Artifacts and information from the Kennedy site can be found at the Tioga Point and Pennsylvania State Museums as well as in the private collection of Ted Keir (A.D. Marble and Company 2003:102).

Sick Farm (36Br50). The Sick Farm site is located in Towanda, Pennsylvania. Witthoft excavated the site in 1948 for the Pennsylvania State Museum to find out more about the Susquehannocks in the region (Kent 2001:301). Lucy asserts that the major pottery type found was Proto-Susquehannock (1985:23), yet Witthoft notes that shell-tempered Susquehannock pottery was the main type found (n.d.:n.p.). Interestingly, Witthoft also encountered a sand-tempered vessel similar in design and form to proto-Susquehannock pottery which he labels simply as sand-tempered Proto-Susquehannock (Witthoft n.d.:n.p.). It is unknown where artifacts from the Sick Farm are currently held.

Johnson 4 (36Br52). Possibly one of the sites under the general Tioga Point designation (36Br3), the Johnson 4 site is said to be located simply between the Chemung and Susquehanna on Tioga Point. The site was tested in 1983 by Steve

Warfel through the Pennsylvania State Museum. Lithics, faunal material, and Schultz Incised pottery was discovered, leading Warfel to designate the site as Late Woodland and Protohistoric. Collections from the site are currently held at the Pennsylvania State Museum (A.D. Marble and Company 2003:105).

Cass (36Br57). The Cass site is only briefly mentioned in Kent (2001). Located in Towanda, possibly near the Sick site, the site was excavated in 1948 by Witthoft. No further information is available (Kent 2001:301).

Wilson (36Br58). Also known as the East Towanda Fairgrounds site, the Wilson site is located on the Susquehanna River near Towanda (McCann 1962:43). Partially excavated in 1957 by Charles Lucy, Gene McCracken, and McCann with the Society for Pennsylvania Archaeology members and volunteers, the Wilson site contains two components: a proto-historic Susquehannock layer over a Transitional site with eighteen to twenty-four inches of sterile soil between (McCann 1962:43). The group excavated a 20' by 23' plot to a depth of between 42" and 60" (McCann 1962:44).

Surface finds from the site included six potsherds, one of which was Schultz Incised, and stone artifacts (McCann 1962:44). The topsoil produced eighteen sherds, eight of which were Schultz Incised along with one Proto-Susquehannock sherd, and stone artifacts (McCann 1962:45). It was not noted if screen sifting was involved. The upper cultural zone was determined to represent a Susquehannock occupation area as the sherds were said to be "overwhelmingly" Schultz Incised (which seems a bit of an overstatement for nine or ten out of twenty-four sherds). As no European items were found, along with the presence of shell-tempered pottery, the site was labeled Proto-Susquehannock (Bradley, personal communication 2010; McCann 1962:46-50, 54-5). It is unknown where these objects are currently.

Schoonover (36Br73). Located on the eastern side of the Susquehanna, north of Spalding Creek, the Schoonover site is also known locally as the Keir-Handrick site. Labeled as a Middle to Late Archaic, Early to Late Woodland, and Protohistoric multi-component site, the site was exposed in 1972 by the flooding caused by Hurricane Agnes. Twenty burials were exposed by the resulting severe erosion and were collected by Ted Keir and Elwin Gillette. Lithics present represented the Lamoka, Levanna, Madison, and Meadowwood phases while ceramics present included Owasco-Carpenter Book, Iroquois Linear, and Proto-Susquehannock. No European trade items were found. Collections from the Schoonover site are currently housed at the Pennsylvania State Museum (A.D. Marble and Company 2003:108).

Blackman (36Br83). A stockaded proto-Susquehannock occupation on the east bank of the Susquehanna in Hornbrook, the Blackman site has been worked by amateurs and professionals (McCracken and Lucy 1989:14). In June 1975, the Pennsylvania Historic and Museum Commission excavated the site, led by Ira Smith III and James Herbstritt. After removing the topsoil mechanically, eight features were fully excavated, thirty-one were bisected and one was trisected. A double row of post-molds indicated a palisade (Lucy and McCracken 1985:6-7). A radiocarbon date obtained from one of the post molds indicated a date of 410 +/- 60 BP, leading to a date of around 1540 A.D. (Herbstritt 1988:6). The date obtained by the radiocarbon information, 1540, appears to be supported by the type of pottery found, which is largely Schultz Incised (although Lucy and McCracken [1985:7] does claim that Proto-Susquehannock pottery is the main type).

Several authors mention burials found at the site; although they seem to reference the same burials, it is difficult to definitively affirm that their notes indeed correspond. Lucy notes that collector Elwyn Gillette obtained a Schultz Incised pot and small shell-tempered Schultz Incised pot from burials (1985:6), although he did

not explain what the difference was between a regular and shell-tempered Schultz Incised pot as this variety is, almost by definition, shell-tempered. Bradley (personal communication) notes that two burials were found: one a sub-adult with a small Schultz Incised pot and beads (glass or copper is not noted) and a woman with a large Schultz Incised pot. McCracken notes that a double burial was found containing Early Schultz Incised pottery and a copper bead (1989:14). Although the details are not always identical, it seems that each author references the same material. It is unknown where the artifacts from this site are currently located, though it may be safe to assume that they are at the Pennsylvania State Museum.

Railroad (36Br88). The Railroad site is located on the west side of the Susquehanna River, north of Buck Creek and Milan. Also known as Pond Hole, the site was noted and collected by Ted Keir and Leroy Vanderpoel among others. Railroad is said to represent an open habitation site of the Middle to Late Archaic and Protohistoric periods and contains Susquehannock ceramics (A.D. Marble and Company 2003:109).

McCaffe 2 (36Br130). A occupation site on the west side of the Chemung just south of its confluence with the Susquehanna on Queen Esther's Flats, the McCaffe 2 site might be synonymous with the Queen Esther's Flats site (36Br6). Much of the information does not match, yet the details of one burial are similar. Artifacts found at the site include lithic tools, shell heaps, and various ceramics including Owasco, Levanna Cord-on-Cord, Munsee, Proto-Susquehannock, Punctate, and Richmond Mills Incised. Artifacts from this site can be found at the Pennsylvania State Museum and in the personal collection of Ted Keir (A.D. Marble and Company 2003:113).

Declared a Middle to Late Archaic, Early to Late Woodland, Protohistoric, and Contact period site, the McCaffe 2 site is said to only have been surface-collected by amateurs. However, one burial is noted as having a copper dangle near the ear and an

iron bar across the cranium (A.D. Marble and Company 2003:113). This exact same artifact type and placement is seen in a burial at Queen Esther's Flats site. As this site is on The Flats, it could easily be the same site. However, some aspects of the two sites do not seem to match. McCaffe 2 is reported to have never seen a professional excavation while Queen Esther's flats were visited by both Moorehead and Griffin. More pottery types are noted for Queen Esther's (20) than McCaffe 2 (6) along with a greater quantity of Indigenous and European goods. On the other hand, McCaffe 2 may represent the efforts of collectors on the Queen Esther's Flats site as the burial description is not noted among the work of Moorehead or Griffin (Bradley, personal communication 2010).

Heath (36Br144). The Heath site is an open habitation site located on the west side of the Chemung. A Late Woodland and Protohistoric site, the area was collected after the 1972 Agnes Flood by Ted Keir. Various lithics and Schultz Incised pottery were noted. It is unknown whether this was simply a surface exploration or a subsurface excavation. Objects from this site are currently in the personal collections of Ted Keir (A.D. Marble and Company 2003:114).

Johnson 6 (36Br147). Surface collected by Johnson and Vanderpoel, the Johnson 6 site is located on the west side of Tioga Point. Probably one of the six sites that make up the general Tioga Point Farm site (36Br3), the Johnson 6 site yielded stone tools and well as Schultz Incised pottery. Collections from the site can be found at the Pennsylvania State Museum (A.D. Marble and Company 2003:115)

Pepper II (36Br176). The Pepper II site encompasses about five acres of land roughly twelve miles up Towanda Creek in West Franklin township (Bradley, personal communication 2010). Excavated in May of 1988 by Richard J. McCracken, the area yielded a plowed-out feature with charcoal containing Schultz Incised body sherds (labeled Schultz Incised although they had an odd mix of shell and crushed

quartz temper), one Schultz Incised (shell-tempered) body sherd, and one rim sherd of Proto-Susquehannock or Richmond Mills Incised pottery (with crushed quartz temper, may have evidence of burned out shell). An animal effigy pipe, a bird bone bead fragment, marine shell, corn, and bone were also found (Tioga Point Museum, Athens, Pennsylvania).

In June 1988, the site was reopened by Helen Stowell and Steve Warfel of the Pennsylvania State Museum. Thirteen 2 feet by 2 feet test pits were dug as well as five 5'x5' pit squares. The test pits were mostly sterile, though some contained some historic pottery and glass. Squares one and two were fire pits. Square three contained a Bainbridge notched rim; four was a pit with a variety of potsherds including Dutch Hollow, Richmond Mills Incised, Carpenter Brook cord-on-cord, and Proto-Susquehannock; and five was a midden continuation. Stowell and Warfel declared the site an intermittedly inhabited multi-component site from the Archaic to the Late Woodland (Tioga Point Museum, Athens, Pennsylvania). It is unknown exactly where these objects now reside, though some are likely at Tioga Point Museum.

Interstate Fairgrounds (36Br210). East of the Susquehanna River near the Athens Bridge, this site was an occupation site containing Middle Archaic, Middle to Late Woodland, Protohistoric, and Contact components. Mentioned by Murray in her 1921 article, the site was subjected to Phase I and II testing by A.D. Marble and Company in 1999. Various lithics and one glass tube bead were encountered, as well as Owasco, Proto-Susquehannock, and Shenks Ferry ceramics. Collections from this site are at the Tioga Point and Pennsylvania State Museums (A.D. Marble and Company 2003:123).

Myron Rosh Field (36Br232). Located between an abandoned canal bed and the west side of the Chemung River, near Spanish Hill, the Myron Rosh Field site is a Middle to Late Archaic, Early and Late Woodland, and Protohistoric open habitation

site. The site was surface collected by Ted Keir after burials were exposed during commercial excavation for gravel. Detailed information on the objects uncovered were not found, although they are thought to be in the possession of Keir (A.D. Marble and Company 2003:131).

Jerry Allen (36Br233). A former garden, the Jerry Allen site is located on the east side of the Chemung River, just north of 36Br36. A Late Woodland open habitation site, the area was surface-collected and excavated by Ted Keir. Proto-Susquehannock and Owasco pottery was identified as well as a variety of lithics. The objects are thought to remain in the possession of Keir (A.D. Marble and Company 2003:132).

Adolph (36Br240). Situated in an open field in the town of Athens, also known as the Athens School Property, the Adolph site represents a multi-component Middle to Late Archaic, Early to Late Woodland, and Protohistoric site. Levanna Cord-on-Cord, Carpenter Brook Cord-on-Cord, Shenks Ferry and/or Proto-Susquehannock pottery has been found at this occupation and burial site. Very little is known of the site or of its collectors, just that it was reported to the Tioga Point Museum in 1918. Collections are currently held at the museum (A.D. Marble and Company 2003:136).

Maurice Property (36Br245). Located between the Murray Garden (36Br2) and Ahbe-Brennan (36Br42) sites, the Maurice Property site was collected by the landowner. Shell-tempered pottery, labeled by past researchers as Proto-Susquehannock, Richmond Mills Incised, Owasco Corded Collar, and Wagoner Incised sherds constitute eighteen grit and seventy-three shell-tempered body sherds. A radiocarbon date was obtained from a Richmond Mills Incised rim of 1410-1460 A.D. The site has been labeled Late Woodland and Protohistoric and the artifacts are housed at the Tioga Point Museum (A.D. Marble and Company 2003:139).

UBR (36Br251). The UBR site is tentatively located on the west side of the Susquehanna River south of Ulster. It was reported by collector Jack Rowe and has not been field verified. Rowe collected various lithics as well as Owasco, Oak Hill, and Proto-Susquehannock pottery from the area indicating that the site is a Late Woodland and Protohistoric period site (A.D. Marble and Company 2003:143). The location of the artifacts from this site is currently unknown, though probably in a private collection.

Jackson Farm (36Br256). On the east side of the Susquehanna, north of Satterlee Creek lies the Jackson Farm site. Like the UBR site, the location of this site was given by collector Ted Keir and has not been field verified. Keir uncovered various lithics as well as Owasco and Shenks Ferry pottery on the site indicating a Late Woodland and Protohistoric component (A.D. Marble and Company 2003:145-6). While unconfirmed, it is likely that the objects from this site are in the personal possession of Ted Keir.

Ted Keir 7 (36Br258). Located on the east side of the Chemung within a former farm field near Spanish Hill, the Ted Keir 7 site is located just north of, and is possibly associated with 36Br28. This occupation site was surface collected by Keir and contained Owasco Corded Collar, Bainbridge Linear, Oak Hill Corded, and Shenks Ferry ceramics. The site has been designated a Middle to Late Archaic, Late Woodland, and Protohistoric site. Objects from the site are currently in an unknown location, though probably in the personal collection of Keir (A.D. Marble and Company 2003:146-7).

Sites in Luzerne County, Pennsylvania

Although less impressive than the Bradford County region, the Wilkes-Barre area has produced a fair amount of shell-tempered pottery, although they remain minority types to the majority grit-tempered Wyoming valley wares (Kent 2001:296).

The area was believed is to be occupied during the Susquehannocks' southward migration and major habitation centers have not been found, nor are expected to be found, in the region. Kent notes that the Susquehannocks pass through the Wyoming valley region is marked by the presence of Schultz Incised sherds in at least two of the major stockaded villages of the Indigenous Shenks Ferry people: Schacht (36Lu1) and Parker (36Lu14). Both sites were excavated by the Pennsylvania Historic and Museum commission and contained small amounts of Schultz Incised pottery, although no European goods were found. Kent believes that this indicates occupation not long after 1550, the date when he believed the Susquehannock migration south from Bradford County to begin (Kent 1970:190)

Analysis

While lack of contextual information makes analysis difficult, it is possible to identify several patterns among Upper Susquehanna Valley sites. Although the exact location of the majority of sites is unknown, general placement is possible for many (Figure 2.1). Topographically, the majority of sites are found in relatively indefensible positions on the flats of Tioga Point. Typically found on the peninsula between the Chemung and Susquehanna Rivers or on either side along the river's banks, these sites occupy a strategic economic, rather then defensive, position. Four sites (36Br1, 2, 42, and 245) are found at the narrowest point on the peninsula, an area only two hundred meters wide that would have provided excellent control of both rivers. Only two sites of known location were placed on defensible knolls: Engelbert and Spanish Hill, neither of which has produced evidence of Susquehannock occupation. The placement of the sites indicates an emphasis on trade and little fear of hostilities, hinting that the Susquehannock migration south was more likely a result of economic opportunism.

Temporal analysis of the sites is difficult. There has been little attempt to order the sites into a sequence and they are thought by many to be contemporaneous. The

small time frame given for this region, typically lasting less than 100 years -- from 1450 to 1550 -- and the lack of stratigraphic context for many artifacts makes temporal interpretation nearly impossible. The small geographical range (the Tioga Point region is only eight miles north-south and six miles at its widest) further obfuscates the data. The multi-component nature of every site likewise complicates temporal analysis, particularly when combined with poor excavation documentation.

The type of settlement utilized also plays an important role in interpretation. Past researchers have stated that the proto-Susquehannocks lived in small hamlets, a major difference from their large, nucleated villages of the lower Susquehanna. These smaller occupation groups, with consequent household moves every couple of decades, seems to provide the best interpretation of area sites, none of which have produced evidence of large-scale occupation (as the lower Susquehanna sites have). Assuming that the sites are contemporaneous, or at least within a fifty to one-hundred year time frame, the distribution of occupation sites in the region suggests a group of people living in small hamlets, spread over roughly sixteen square miles. There is a possibility that the sites represent linear moves; unfortunately, the short time frame and the general lack of contextual evidence from most sites restricts such interpretation. The relatively large number of sites (forty-three in this study) that relate to roughly the same time period of both occupation and burial context appear to support this settlement view.

The geographic location of different site types, burial or occupation, also provides interesting pattern (Figure 3.2). Identification of sites as burial or occupation is based on the conclusions reached by past researchers (I did not have enough artifact information to form my own conclusions) about the Susquehannock component only and is sometimes questionable, as can be determined from the individual site descriptions.

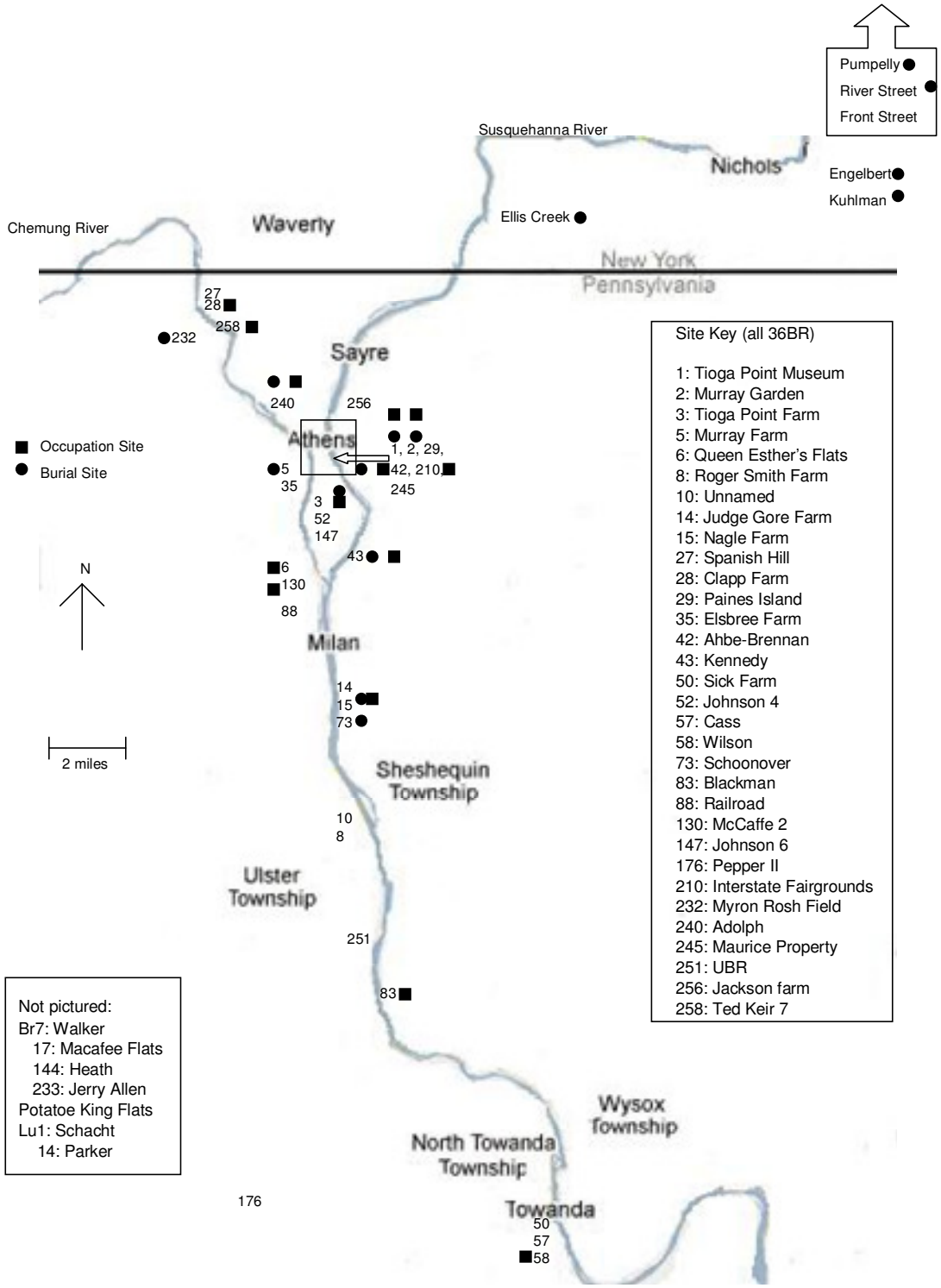

Figure 3.2. Proto-Susquehannock sites by site type. Denoted by their designation as burial or occupation areas.

The New York sites are all described as burial only and, aside from Engelbert, represent what appear to be isolated graves. There is a definite cluster of sites situated on and around Tioga Point, both burial and occupation. Of the sites described by past researchers, five are occupation only, two are burial only, and six contain both occupation and burial components. Farther down river, less than four miles, are the Sheshequin sites, one of which is burial only (Br73), while the other (Br15) contains elements of both. Sites in Ulster (Br83) and Towanda (Br58) are described as occupation only. Tentatively, there appear to be more burial sites in the northern part of the study area, while occupation sites are generally found farther south.

This brings up the issue of burial practices. Proto-Susquehannock burial practices are often assumed to be similar to those of the historic Susquehannocks, who lived in palisaded villages and buried their deceased in large cemeteries outside of their towns. This assumption quite possibly confounds interpretation of earlier sites. As the proto-Susquehannocks probably lived in small hamlets, why would a burial model for a completely different occupation layout be followed? What if individuals, instead of being buried in separate cemeteries, were instead buried in the occupation area? This seems to be the case with the six sites on Tioga Point that contain elements of both burial and occupation contexts. Other sites, such as Br6 were documented above as occupation only but are also noted as containing one or two scattered burials (which may or may not relate to the Susquehannock component). It must be noted that all occupation sites in the Athens region are within one-half mile of a burial site.

Excavation methodology and intent may further compound the issue as the majority of early excavations, by professionals and collectors, focused almost entirely on burials in an effort to collect grave goods. Furthermore, as there has been little archaeological research conducted in the area since the 1970s it is quite possible that

much information remains to be found or has been lost with recent residential and commercial expansion.

Nevertheless, there appears to be a difference between the New York and Pennsylvania sites. The Engelbert site's Susquehannock cemetery provides an interesting example. Noting that ten of the fifteen individuals found in the Engelbert Susquehannock "cemetery" were found in double graves, with the more recently deceased skeleton (thought to be Susquehannock) overlaying the temporally earlier individual, Beisaw (2010) hypothesized that this unique burial habit was an attempt to reconnect with ancestors. Described by Beisaw (2010) as reburial (and defined as the purposeful internment of deceased individuals into existing graves); this practice may explain the presence of Susquehannock burials without related occupation areas, particularly in New York state.

Perhaps a related funerary practice was followed in which individuals were buried near ancestral sites, though not necessarily within already occupied graves. Using Jordan's (2008) concentric circles model, the majority of the study area falls into the 'local' circle, defined as less than 20 kilometers (or 12.4 miles) from the occupation area. The distance from the northernmost sites (Nichols, New York) to the southernmost (North Towanda Township, Pennsylvania) is roughly 48.2 kilometers (30 miles) which falls into the 'regional' circle (Jordan 2008: 40). One possible interpretation is that the New York sites, similar to and including Engelbert, represent burial by later peoples outside of their immediate occupation area, either with individuals of an earlier time or individually.

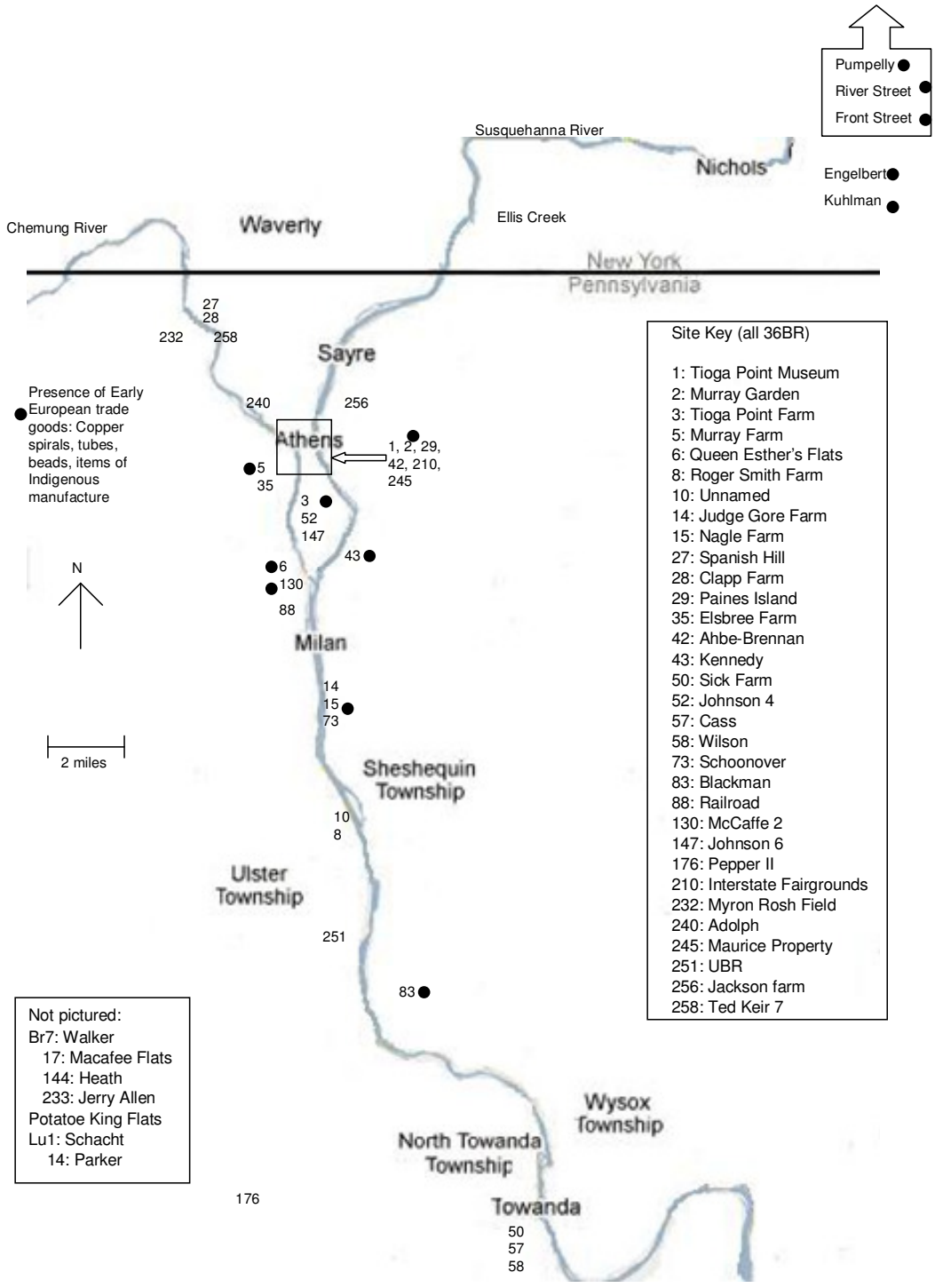

Figure 3.3. Copper Artifacts found at Proto-Susquehannock sites. Sites marked by the presence of copper artifacts

The distribution of copper objects (Figure 3.3) may further illuminate this issue as five of the six New York sites contained copper objects while only eight of the thirty-six Bradford county sites contained such early European trade objects. The prevalence of copper in New York suggests a later time period than the Bradford County sites, corroborated by the high presence of Schultz Incised pottery in the area (see Chapter 4), and is at odds with the currently accepted migration model for the Susquehannocks. As all of the New York sites correspond to burials only (no occupation sites have yet been found), and contain objects assumed to represent a later time period than the Tioga Point sites, it is possible that they signify a later people, consistent with Beisaw's reburial hypothesis. However, as the prevalence of European trade objects is still relatively low at these sites, it is possible that, if they do represent reburial or extra-local burial, the individuals found represent inhabitants of the lower Bradford County sites, particularly those past Sheshequin that do not have an associated burial site. With only thirty miles separating Towanda from Nichols, connected by a convenient water transportation route, this hypothesis does not seem impossible.

CHAPTER 4

PROTO-SUSQUEHANNOCK CERAMIC SERIATION

Overview

In his seminal work, Kent (2001) states "Pottery is the key, in fact the only identifiable archaeological remain by which we can confidently recognize the occupation sites and trace the movements of our Susquehannocks" (295). The role of ceramic seriation to Susquehannock studies, particularly to Susquehannock origin research, is paramount. While no two pots are identical as a result of their handmade manufacture, pottery styles within a community tend to fall into broadly defined types as individuals who work together often produce similar products (Engelbrecht 2003:82).

Iroquoian pottery expresses several pan-regional characteristics such as a globular body, a round bottom, and an emphasized collar (Bailey 1938:333). The majority of Iroquoian vessels likewise contain similar decorative motifs, often constituted by incised lines arranged in a geometric (triangular, rectangular, or trapezoidal) pattern with circular punctate marks (Bailey 1938:334). This pan-Iroquoian type suggests relatively open networks of interaction between Iroquoian, and non-Iroquoian, groups (Cobb and Nassaney 1995:211-218). The presence of non-local, or foreign, ceramics at most Iroquoian sites may likewise support the notion of several archaeologists that an extensive Indigenous trading network, leading to the movement of objects as well as people and ideas, operated throughout the northeast and beyond (Kent 2001:112).

As previously mentioned, the direct historic approach has been used to trace and connect historically known cultures to their undocumented ancestors. Typically conducted through ceramic seriation, this method rests on the belief that the evolution

of pottery involves the addition and subtraction of attributes within the manufacturing process and that the possibilities for new types depend largely on contingencies inherent in older types (Garrahan 1990:17). In the 1950s, MacNeish used this approach to tentatively connect the historically-known Iroquois to the Owasco culture. By tracing back through time overlapping pottery types and ceramic trends, MacNeish developed an in situ approach to Iroquoian origins (1952:1).[4]

Although MacNeish does not explicitly focus on the Susquehannock, stating that he was unable to obtain enough sample sherds for an accurate study, he does note that Susquehannock pottery and cultural development was extraordinarily similar to the Cayuga (MacNeish 1952:55). Numerous others appear to agree with MacNeish on this point. Witthoft (1959:36) notes the overlapping ceramic styles between the groups, stating similarities in shape, finish, and decoration with the only obvious difference being in paste. Kent agrees with Witthoft, claiming that differences between Susquehannock and Seneca-Cayuga pottery appear to be mostly in the type of temper used (Kent 1980b:103). It is unknown whether Witthoft was referring to the same attribute (grit temper) as Kent when using the term "paste." The main issue left to be resolved appears to be whether the Susquehannock pottery is most similar to the Cayuga before or after they supposedly split from the Seneca. The answer to this question would likely answer, and raise, several questions on the time and location of Susquehannock origins.

Some researchers believe that the first identifiable Susquehannock pottery, termed Proto-Susquehannock, is a direct descendent of the Cayuga type Richmond Mills Incised. Kent and others imply a direct progression from Richmond Mills Incised to Proto-Susquehannock, and finally to Schultz Incised (Kent 2001:115;

[4] MacNeish is a seminal figure in Northeastern America Indigenous archaeology. Published in 1952, his influential work on Indigenous pottery called the accepted Iroquois origin theories into question, stating that the Iroquoian culture developed in situ.

Stewart 1973:1). There are several problems with Susquehannock ceramic seriation that may reduce the validity of this argument. The first, and most important, is that past researchers have not agreed on the exact definitions of these three types. The form and decorative aspects of these ceramics are so similar that most researchers, particularly those making quick decisions in the field, often distinguish between the three by their temper. However, as two (Richmond Mills Incised and Proto-Susquehannock) are both grit-tempered vessels, the distinction between these groups is often difficult to recognize.

Typically, scholars utilize minute details such as the exact size of the collar or pattern of incising without regard to individual innovation or variation in execution. Furthermore, it has yet to be decided what traits specifically illustrate Susquehannock culture, leading various researchers to claim that each of these three types represent the first distinguishable ceramics of the Susquehannocks. Another issue lies with the culture-historical belief that pottery defines a culture, the either-or idea that does not allow for individual expression, innovation, or even mistakes in execution.

Richmond Mills Incised vessels are associated with the late prehistoric Cayuga in the southern New York and northern Pennsylvania region (MacNeish 1952:51). Although noted as a Cayuga type, the vessels have been equated by many with the Susquehannocks (Lucy 1991:8). Grumet (1995) illustrates this relationship claiming that Richmond Mills Incised represents the first evidence of the Susquehannocks (332-333). Richmond Mills Incised vessels are grit-tempered, globular vessels with a constricted neck and high collar (2.5-3.5 inches) (MacNeish 1952:51) (see Figure 4.1 for illustration of pottery analysis terminology). The collars are decorated with incised designs and typically contain four castellations (MacNeish 1952:51).

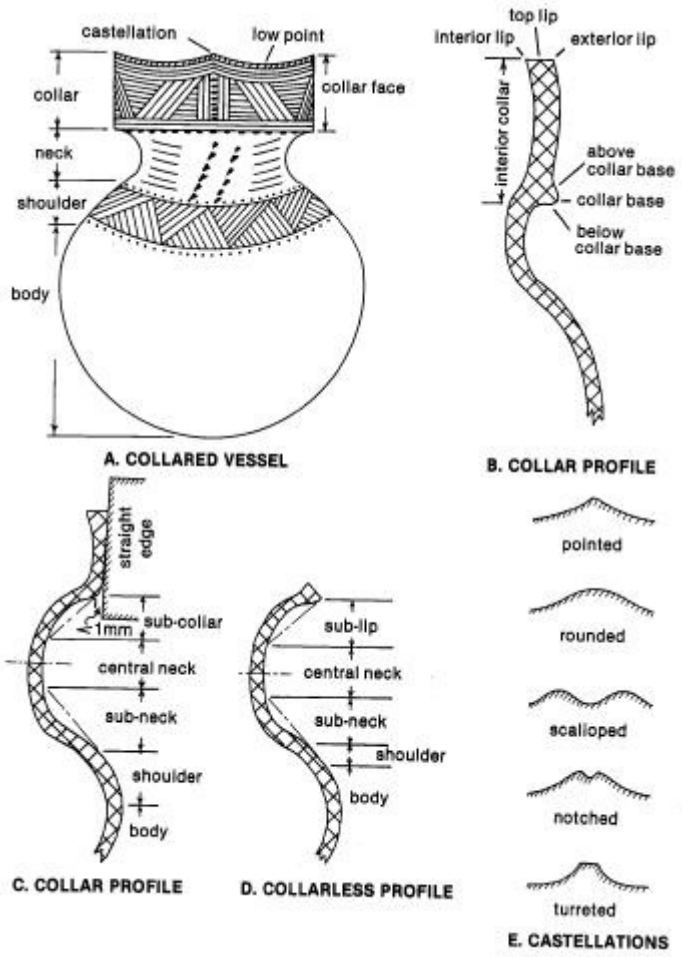

Figure 4.1. Pottery Anatomy. Illustration depicting essential definitions of pottery anatomy. (from LaFrance 1980:52).

Proto-Susquehannock pottery is thought by many, through the direct historic approach, to be the closest ancestor to the lower Susquehanna valley ceramics (Stewart 1973:1). Developed out of the Richmond Mills Incised tradition, Proto-Susquehannock pottery is globular with a high collar (typically comprising one-half the overall measurement of the vessel) and contains a fine grit tempering. Although rare, sculpted human faces are seen as highly characteristic of these vessels, a trait which later became conventionalized in the Schultz (1575-1600) and Washington Boro (1600-1625) phases (Kent 1980b:99; Lucy 1979:9, 391; Lucy and McCracken 1985:24) and which was observed at the Murray Garden (36Br2) site. Contrary to

Grumet, Witthoft declares this pottery type to be the earliest distinguishable form of Susquehannock culture (Witthoft 1959).

Schultz Incised pottery is generally accepted by most scholars as the first distinctive Susquehannock ware (against the earlier presented views of Grumet and Witthoft), as it is the first to include the distinguishing shell temper present in all later Susquehannock ceramics. With similar form and decoration to Proto-Susquehannock pottery, Schultz Incised wares are practically identical to earlier forms and are distinguishable only by their temper (Bradley 2005:58; Kent 2001:113).

Witthoft differentiates between two varieties of Schultz Incised pottery, which he terms Early and Late, claiming that the early varieties are represented in the Upper Susquehanna Valley and the Late type in the Lower. Claiming that the Early Schultz Incised pottery is often "a crisper, more expert designing and execution, and slightly better form and proportion, as compared to the Lancaster County examples" (Witthoft 1959:28), Witthoft distinguishes between the types based on concepts that are, in his words, more important than technical attributes such as lip treatment or rim form (Witthoft 1959:28).

However, others have had difficulty applying his two types to actual artifacts as his distinctions are subjective and require access to visual examples (Crannell 1970:146). As the differences stated by Witthoft are not operationally feasible, few researchers utilize the Early Schultz Incised concept. However, some sites have been noted as containing Early Schultz Incised pottery. The Engelbert site shell-tempered sherds were described by Crannell (1970) as Early Schultz, although Crannell's conclusions were tentative due to some confusion regarding what traits actually constituted Early Schultz Incised pottery. Kent labels all shell-tempered pottery found in Bradford (Pennsylvania) and Tioga (New York) counties as Early Schultz Incised (Kent 2001:306).

Several varieties have been noted in relation to these three types, the most prominent being Funk Incised and Ithaca Linear. Funk (or Funck) Incised is a late Shenks Ferry type dating to the sixteenth century that was thought to have been created when the Shenks Ferry people were in contact with the Susquehannocks. Stylistically Funk Incised generally resembles Schultz Incised, yet the details are seen as slightly different. Noted by Witthoft as a deliberate attempt to mimic the Susquehannock ware, Funk Incised sherds have been found manufactured from Susquehannock paste and temper (Witthoft 1959:23. See also Kent 1980a:35; Kent 2001:128).

Ithaca Linear is a grit-tempered historic pottery prevalent in the Susquehanna drainage and Cayuga area that differs from Schultz Incised only in temper (grit versus shell) (Kent 2001:134). It is thought that Ithaca Linear pottery was an attempt to express a Susquehannock concept in an Iroquoian medium (Bradley 2005:58-60), yet if it is differentiated from Schultz Incised only through its grit tempering, and Proto-Susquehannock pottery is also distinguished from Schultz Incised only through its grit tempering, is it not possible that Ithaca Linear is more closely related to Proto-Susquehannock wares? Decorative motifs may aid in distinction, yet references do not agree on definitions.

This issue further highlights the overall similarity of the pottery in the region and the difficultly that researchers face when attempting to recognize distinction. Kent (2001) defines five attributes of Susquehannock (generic, not specifically Schultz Incised) pottery:

1. The top of the collar is bounded by one or two lines of horizontal incising or punctation;
2. Broad shallow incising;

3. Triangular, diamond, or rectangular plats combined to form numerous geometric patterns;
4. Enclosed right triangular plats filled with elliptical punch marks, short lines of incising, or parallel horizontal incisings; and
5. Smoothed collars into which incising is applied (131-132).

These traits are similar to those presented earlier by Bailey (1938) and can theoretically be used to measure relationships between the different varieties of pottery. Early Schultz Incised typically exhibits all of the traits, while Proto-Susquehannock pottery demonstrates all but number four. However, Ithaca Linear, a "Cayuga" type, also exhibits all five traits (Kent 2001:132). Obviously, it is quite difficult, particularly for the untrained researcher, to correctly identify and distinguish between these different pottery styles.

The exact relationship between Richmond Mills Incised, Proto-Susquehannock, and Schultz Incised pottery is unresolved, though general consensus agrees with Kent's (2001:115) idea of a direct progression (see also Lucy and McCracken 1985:11). Found in roughly the same geographical region, these three types are differentiated primarily on the basis of temper type and minor design elements. McCracken (1989) states that Proto-Susquehannock is distinguishable from Richmond Mills Incised, both grit-tempered types, simply by size, claiming that Proto-Susquehannock pottery is larger than Richmond Mills Incised (15). No other differences between Richmond Mills Incised and Proto-Susquehannock pottery have been noted.

Schultz Incised is differentiated from the other two based on its use of crushed shell as temper (Kent 1980b:99). The development and spread of shell-tempering is poorly understood (Cobb and Nassaney 1995:209-210), and it is unknown exactly how the Susquehannocks learned this trait. Feathers (2006) notes the dramatic increase in

the use of shell-tempering in the Late Woodland period (89), an increase that appeared contemporaneously throughout the Midwest, Gulf of Mexico, and Mid-Atlantic regions (93). Some believe the Susquehannock use of shell-tempering to be derived from Mississippian influence and note the entrance of shell-tempering into the Monongahela area around A.D. 1000 (Kent 1980a:36; Holstein 1979:49). Using the West Branch of the Susquehanna River as a trade conduit, the Susquehannocks are believed to have first observed the use of shell as temper when in contact with the Monongahela of western Pennsylvania (Crannell 1970:153; Kent 1980b:99; Lucy and McCracken 1985:27).

Others believe that shell-tempering first originated along the Mid-Atlantic or southeast coastal regions. Claiming that shell-tempering technology was known by eastern seaboard groups long before it was observed in the Ohio Valley region, Holstein (1979) notes similarities in trade goods, particularly the presence of Mid-Atlantic marine shell in the Monongahela region and Monongahela cherts in the Mid-Atlantic region, as an indication of economic contact between the regions (48-49). Shell-tempering is generally found along the eastern seaboard and in smaller quantities along its river drainages (Crannell 1970:61-63; Holstein 1979:50).

Analysis

The relationship between Richmond Mills Incised, Proto-Susquehannock, and Schultz Incised pottery is unclear (Figure 4.2). The fact that all three types are found at roughly contemporaneous sites defies the direct temporal progression proposed by Kent (2001). In the area studied, at least four sites, possibly three others, contained both Proto-Susquehannock and Schultz Incised pottery in direct relation to each other while three sites contain all three pottery varieties. Furthermore, four sites contained both Richmond Mills Incised and Schultz Incised, but not Proto-Susquehannock pots, further confusing the evolutionary model.

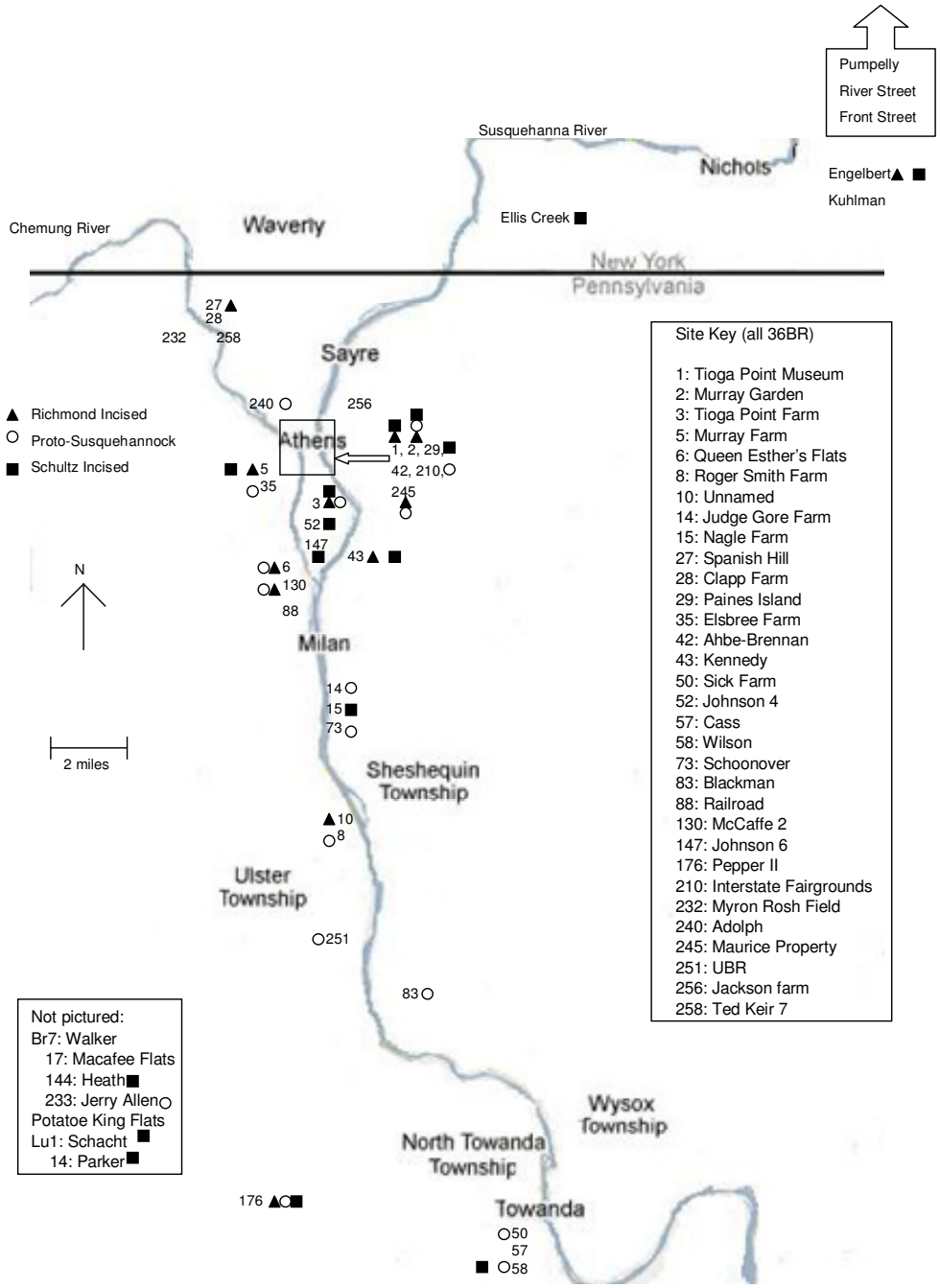

Figure 4.2. Proto-Susquehannock sites by pottery type

Geographically, both Richmond Mills Incised and Schultz Incised, the polar ends of the supposed continuum, are found throughout the region from Nichols, New York to Towanda, Pennsylvania; Proto-Susquehannock wares are found only in Pennsylvania. All three varieties are concentrated primarily in the Athens region, which could be a result of the large number of sites in the area or their position along a major trade route. Interestingly, many sites contain more than one pottery variety and Richmond Mills Incised is found in association with Proto-Susquehannock wares roughly as often as with Schultz Incised.

Past researchers (Cobb and Nassaney 1995:210) have hypothesized that Schultz Incised in this region, which is often referred to as Early Schultz Incised in this context, is a strictly ceremonial ware. This specific use of Early Schultz Incised could explain its contemporaneous position with Proto-Susquehannock pottery (McCracken and Lucy 1989:15). Noting that Early Schultz Incised ware is often restricted to burial contexts, many interpret the type as a purely ceremonial ware used contemporaneously with Proto-Susquehannock and Richmond Mills Incised everyday-wares (Lucy and McCracken 1985:19-20). The Engelbert site is the first recognized area where this hypothesis is probable (Beisaw 2008). The Ellis Creek site is likewise noted as a burial site that contained Schultz Incised pottery and provides further support for the unique burial hypothesis presented earlier; other site reports are far less detailed and provide less information for analysis. Unfortunately, the majority of early excavations in the area have focused purely on burial contexts. This fact, along with the lack of detailed records and overall contextual information for the sherds found, makes it virtually impossible to test this theory at the majority of Proto-Susquehannock sites.

Table 4.1. Presence of Susquehannock-related Pottery Types, by site

Richmond Mill Incised	Proto-Susquehannock	Schultz Incised
Engelbert	Br 2	Engelbert
Br1	3	Ellis Creek
2	6	Br 1
3	8	2
5	14	3
6	35	5
10	50	15
27	58	29
43	73	43
130	83	52
176	130	58
245	176	144
	210	147
	233	176
	240	Lu1
	245	Lu14
	251	

The three types are prevalent in roughly equal number of sites in the region. Richmond Mills Incised ware is found at a total of twelve sites (Table 4.1). Proto-Susquehannock ware is found at the most sites of the three, seventeen; Schultz Incised (Early or non-differentiated) is found at sixteen sites. There are seven sites that contained pottery simply denoted as Susquehannock or as shell-tempered but not Schultz Incised: Kuhlman, Br3, 6, 10, 29, 50, and 88. Three sites (Br2, 3, and 176) demonstrate contemporaneous usage of all three types (see Figure 4.3).

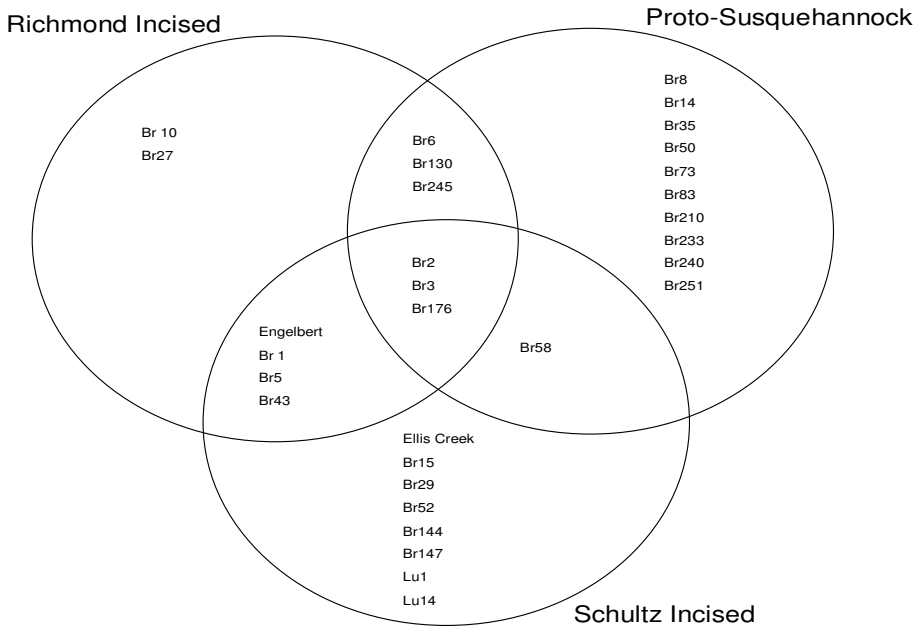

Figure 4.3. Relationships between pottery by site.

The problem of definitions is again raised when attempting to culturally and temporally place sites by pottery type. The issue is particularly evident with Proto-Susquehannock and Schultz Incised wares. Although described as grit-tempered in the majority of literature, some sherds labeled Proto-Susquehannock are noted as being sand (Br50) or shell (Br 245) tempered. Sites with pottery noted as simply Susquehannock could represent either an inability to distinguish between the different types, or other shell-tempered sherds from unrelated groups described as Susquehannock simply because they are shell-tempered.

Furthermore, every site examined contained a wide variety of pottery sherds and, perhaps most importantly, few sites described as Proto-Susquehannock actually contained a sizeable percentage of Susquehannock pottery. The fact that all of these sites are multi-component may be the reason for this low proportion, although without

detailed context information it is near impossible to determine percentages for a particular area of a site. Significant trade with regional groups may likewise be a factor in the prevalence of foreign pottery. Another possibility is that the Susquehannocks did not occupy the site, that the Susquehannock pottery found represents some other form of inter-group contact. Interestingly, many sites in the region have been labeled Susquehannock based on the simple presence of shell-tempered pottery, regardless of how prevalent that pottery type actually is at the site.

Unfortunately, few excavators give actual counts or percentages of pottery types from their sites and numbers for only five sites were available for analysis. The Murray Garden site (36Br2) contained seven Schultz Incised sherds representing 24.1 percent of the total and six Proto-Susquehannock sherds equaling 20.7 percent. The Tioga Point Farm site (36Br3) contained seven sherds of Schultz Incised (0.55 percent) sixteen sherds of Proto-Susquehannock (1.27 percent), fifty-six sherds of Richmond Mills Incised (4.45 percent), and seven sherds of Susquehannock pottery (shell tempered but not Schultz Incised : 0.55 percent).

The Wilson site (36Br58) contained the largest percentage of identifiable Susquehannock pottery (although admittedly a small sample size) with Schultz Incised representing 44.4 percent of the total (8 sherds) and Proto-Susquehannock representing 5.5 percent (1 sherd). Interestingly, the sherds found at the Wilson site do not represent a burial context, which all of the other sites apparently do. The Maurice Property site (36Br245) represents the largest percentage of shell-tempered pottery (80.2 percent), although it is unclear whether the sherds are stylistically Susquehannock. As the site is located in the center of Athens, an area with a relative abundance of Schultz Incised sherds, it is probable that the sherds are Susquehannock. At no site, with the possible exception of the Maurice site, is there an overwhelming majority of Susquehannock pottery that may indicate occupation.

The great variety shown through these percentages, from less than one percent to over 80 percent, and the similar conclusions reached through them represent an important interpretational issue. Sites in the Upper Susquehanna River Valley are typically denoted as Susquehannock if shell-tempered pottery is found, regardless of the amount recovered. These vastly-varied percentages likely represent a variety of social processes by which these assemblages were accumulated and it is an intellectual fallacy to assume that the simple presence of one type of pottery indicates occupation by a particular producing group.

CHAPTER 5

‘EXOTIC’ POTTERY: THE SIGNIFANCE OF INTER-SOCIETAL CERAMIC VARIABILITY

It is common for archaeologists to encounter ‘exotic’ or foreign pottery in an assemblage. The term ‘exotic’ pottery, synonymous with foreign or non-local, refers to any ceramic item that shows traits characteristic of groups other than those typically associated with the site. Variable features of pottery-- particularly those concerning composition, manufacturing technique, vessel form, and decorative motifs-- are thought to be based on cultural norms and are particularly susceptible to temporal and spatial changes (Arnold 1978:39). When such differences are identified at an archaeological site, questions concerning intra- and inter-societal relations emerge. These questions can be simplified into a general problem: is the pottery locally made, in reference to the site at which they were found?

Definition

Variation can be minimally defined as difference. Ceramic variation occurs on two levels: instrumental form and adjunct form. Instrumental form concerns the composition and form of the ceramic, things that are built in such as temper, thickness, vessel shape, size, and so on. Adjunct form, on the other hand, describes parts of the pottery that are added on such as surface treatment and decoration. These forms correlate with the categorical distinction between the functional and aesthetic traits of the pottery (Chilton 1998:159).

Although ceramic variability occurs in the assemblages of many diverse cultures, the majority of such studies have focused on American Indian, specifically Iroquoian, variability. There are several important assumptions that researchers generally utilize when analyzing Iroquoian collections:

1. The spatial distributions of cultural materials are patterned or structured,

2. Some stylistic elements may be associated with particular social groups,

3. Techniques are learned before marriage from the mother,

4. Manufacturing pottery is a female activity, and

5. All households made pottery; none exchanged pottery (Plog 1978:144).

Another assumption, termed the post-marital residence rule, also must be considered. This rule takes the above assumptions into account and states that a matrilocal residence pattern leads to a non-random assemblage within a community while a patrilocal system demonstrates neither spatial nor temporal continuity (Plog 1978:145). Thus pottery, made by women, will be uniform if matrilocal and diverse if patrilocal residence is practiced.

The significance of foreign pottery lies in stylistic analysis and what style differences can illustrate about inter-societal interactions. Wobst (1977) states that stylistic behavior has three functions: to provide immediate visual information about participants in social interactions, to reinforce social differentiation and enhance intra-group solidarity, and to signify and maintain boundaries (327-328). Researchers analyzing inter-group differences focus on pottery micro-styles. A micro-style signifies a local tradition: characteristic combinations of technological, formal, and decorative attributes, that are conditioned by learning patterns and processes of personal interaction among potters within a given community (Dietler and Herbich 1989:150). Attributes are measurable characteristics of elements or of motifs and include features with clear alternative states (Rice 2005:259).

Types of Variation

Variation appears in two forms: ceramic identities and ceramic homologies. Ceramic identities represent the flow of ceramic objects from one locality to another. Identities are indicated by the physical movement of material goods (Ball 1983:126)

and represent direct transference of vessels and/or population movement (Peterson 1990:33). Ceramic identities are demonstrated through trade or commercial interactions and incidental transport (Ball 1983:127). In this sense, pottery is not locally made.

Ceramic homologies, on the other hand, represent vessels of two or more spatially removed localities which resemble, approximate, or even duplicate each other but which differ technologically in ways that indicate their separate localized production (Ball 1983:126). Homologies are a result of ideational diffusion, movement of ideas and beliefs on correct ceramic form, manufacture, or decoration (Ball 1983:127) and imply some form of interaction (Peterson 1990:323). Ceramic homologies are illustrated through population movements or migrations (either large or small scale), population segment movements (movement of commercial producers, domestic producers, or consumers), or copying of foreign traditions by locals stimulated by personal experience or imported vessels (Ball 1983:128). In this model, the 'exotic' pottery is locally made.

The question then is simply focused on whether people or pots were introduced into a new area. This question can be answered by determining where the pottery was made. When analyzed in terms of the pottery itself, ceramics that represent identities will be manufactured in the 'foreign' area while those that represent homologies will be manufactured in the 'local' area and will have utilized some degree of foreign technique (usually constructive or decorative) in the creation of the vessel. Thus, an ideal way to differentiate between the groups is through trace element analysis, specifically petrographic thin section analysis (PTSA) and instrumental neutron activation analysis (INAA).

PTSA is a method of mineralogical analysis used to determine the mineral constituents of pottery. Thin sections taken from the sherd are optically examined to

determine the type of inclusions (temper) (Rice 2005:372). If the inclusions seen are found locally, the sherd might represent a ceramic homology, while foreign inclusions can represent ceramic identity. INAA is a method of chemical analysis used to identify the clays found in a sherd (Rice 2005:396). Similar to the results of PTSA, if the chemical content of the sherd does not match that of the local environment, researchers can safely assume ceramic identity. However, if the clay is found to be local, ceramic homology is most likely represented.

Explanations for Variation

Foreign pottery is present on many northeastern sites and often represents a sizeable portion of the total ceramic assemblage (Strauss 2000). J.M. Wright (2006) notes that roughly one-fourth to one-half of any assemblage found in this region is made up of "foreign" pottery (40). Her studies of the Wendat Confederacy have shown that Wendat sites average 33 percent foreign sherds in any given assemblage (J.M. Wright 2006:56). Researchers have hypothesized several reasons for the appearance of foreign pottery at a site. These can be categorized by the two types of variation, identities and homologies. The hypotheses presented for these types are neither exclusive nor exhaustive of variation possibilities.

There are two hypotheses for movement that produces ceramic identities. The first is economic or commercial trade. In this case, the pots themselves are traded or are incidentally traded with their contents (often agricultural products). Such activity would create an assemblage that included variable amounts, based on the quantity and/or frequency of trade, of foreign sherds. The second hypothesis is linked to temporary population movement as a result of trade or short-term movement (for example hunting, warfare, and so on). This incidental transport is still classified as a ceramic identity as the pots would have been manufactured in the home village and brought with the traveler. Likewise, such movement would produce variable amounts

of foreign sherds. The difference between these is intentionality. Traded pots were intentionally given to the recipient group while pots falling into the second category initially had no such direct economic purpose.

Hypotheses concerning ceramic homologies fall into four categories. Two concern the movement of people while the remaining two concern the movement of ideas. It should be noted that in this group, unlike in the ceramic identity group, 'foreign' implies locally-made yet morphologically 'exotic'. The first hypothesis concerns population exchange (Knapp 2009:122). This includes the popular 'captive-bride' theory, consensual marriage, and adoptions. These illustrate cases of small-scale population mixing, whether consensual or through force, and could be inferred from assemblages that contain a small percentage of foreign sherds. Another reason could be large-scale permanent population movement, either voluntary or forced. The presence of refugees is a main contributor to this category and the assemblage should reflect a large influx of people by containing a large percentage of foreign sherds.

A foreign pot does not necessarily imply a foreign potter. The ideas of diffusion and syncretism illustrate the movement of ideas between groups. Emulation or diffusion occurs when potters copy other styles that may or may not be present. This concept may also be linked with trade, as women may have seen a style while travelling and brought back the knowledge of a particular style to their village. In this case, it is not necessarily a foreign potter that is present, but a foreign idea. This model would produce variable amounts of foreign sherds. Syncretism ensues when two ideologies are combined. Thus, a pot would not be identical to either the local or the foreign tradition; it would encompass traits from both to create a new style. This assemblage would produce a categorically new style of pottery similar to both the local and foreign tradition. Both of these models are still considered ceramic homologies as the 'foreign' pot was made at the local site using local materials.

While it is possible to distinguish between identities and homologies, it is often impossible to distinguish between the hypotheses within each group. Various information sources, such as historical analogy, documentation (if available), and overall artifact assemblage, are essential to analysis. As a result of these difficulties, researchers often provide varying answers to the question of ceramic variability.

Examples of Variation

The main issue with the trade hypothesis is the general assumption that pottery was rarely traded as it is heavy and fragile (Latta 1991:377). However, Latta notes numerous documentary references to trade in commodities that would usually be stored in ceramic containers (1991:377), thus leading some scholars to consider trade as a main hypothesis (Lucy 1959:37; Ramsden 1975:272,287). Bradley (2005) notes Susquehannock pottery on Onondaga sites, stating that the stylistically unmodified sherds found most likely represent trade between the groups (58-60). Likewise, Kent (1980b) notes the presence of pure Seneca and Cayuga grit-tempered pottery types found occasionally on Susquehannock sites and vice versa (103)

Jamieson (1990) noticed increasing frequencies of St. Lawrence Iroquois pottery and pipes on Huron sites which he attributed to increased trade resulting from political alliance. As men were typically the pipe manufacturers, and taking into account the elevated role of smoking pipes in Indigenous socio-politics, the discovery of similar pipes at different sites is seen as evidence of political alliance. Jamieson argues that increased political alliance would doubtless increase trade between sites. Thus, sites with both foreign ceramics and pipes can be interpreted as economic partners (Jamieson 1990:84).

The temporary population movement hypothesis likewise has several supporters. Iroquoian traders were historically known to take smaller, individual sized vessels on canoe trips when travelling (Trigger 1976:172; Latta 1991:379, 380). These

smaller, portable vessels provided both a cooking pot and a chamber pot (Latta 1991:380). If broken, the traveler likely would have replaced the vessel as soon as possible, resulting in two anomalous sets of sherds: the broken set (vessel type A at location B) and the replacement (vessel type B at location A) (Latta 1991:380).

Two studies analyzed ceramics produced by traveling St. Lawrence Iroquoians. Moreau (1991) utilized chemical analysis to determine that sherds found on the north shore of the St. Lawrence River (at Chicoutimi – non-St. Lawrence Iroquois territory) were of Iroquoian origin (33) while Chapdelaine (1990) came to roughly the same conclusion regarding a St. Lawrence Iroquois-type sherd on the Strait of Belle Isle (42). Both studies found that the clay used was not local. This information, combined with the small amount of anomalous sherds found, led the researchers to conclude that these sherds were introduced by travelers.

Ceramic homologies are often more difficult to interpret then identities. The population exchange hypothesis contains three possibilities that would produce matching outcomes. The captive-bride theory is the most commonly used to explain ceramic variation on Iroquoian sites. In this model, captives from other tribes continue to create pottery, using local materials, in the manner of their homeland. This model has been used as a keystone of an argument concerning the violent assimilation of the St. Lawrence Iroquois by the Five Nations (Jamieson 1990:79-80, 82). Nevertheless, very few researchers have conclusively supported the captive-bride argument (Kuhn 2007:324).

Unfortunately, consensual marriage would produce identical results. While this explanation appears to be the most popular, the captive-bride model has never been fully discounted. Exogamous marriage is supported by several scholars including Trigger (1976:173) and Engelbrecht (1984:333-7). Knapp (2009) encountered an unusual assemblage at two sites, one in New York the other in Pennsylvania, which

exhibited large percentages of foreign pottery (122). Trace element analysis confirmed that the pottery was locally made leading Knapp to claim that in an exogamous system women would continue to pot using their native style as a way to build alliances and maintain connections with their natal community (2009:123-4).

Another process that would produce the same results as marriage, and likewise would be impossible to differentiate, is that of population exchange or adoption. Trigger (1976) explains the presence of Huron pottery on Algonquian sites by proposing that Algonquian girls may have lived with the Huron as part of a ritual exchange between trading partners. The girls would have learned potting techniques from the host family and, when returned to their village, continued to pot in the Huron fashion (Trigger 1976:173). Kuhn (2007) suggests adoption to explain the presence of high frequencies of St. Lawrence Iroquois pottery on Huron sites (328). Although characterized by drastically different intentions and social conditions, these three possibilities (captive marriage, consensual marriage, and exchange) unfortunately create the same outcomes. Thus, the vague term population exchange is often used (Peterson 1990:36).

Permanent large-scale population movement would produce an assemblage quite different from small-scale exchanges (marriage, etc.). Unless marriages occurred solely between two groups, the assemblage created from both consensual and captive brides would probably not include a large quantity of any one type of foreign vessel. Migration, on the other hand, implies the movement of a large number of people, a process which would produce a large percentage of foreign sherds. James V. Wright claims that the high percentage of St. Lawrence Iroquoian pottery on Huron sites suggests migration (1979:73) while Kuhn interprets the large percentage of Huron pottery on Mohawk sites in a similar fashion (2007:323). Kuhn also conducted trace

element analysis to determine that the pottery represented a homology rather then an identity (323).

A smaller percentage of foreign pottery may be produced by smaller groups of residing foreigners. J.M. Wright (2006) notes the presence of Susquehannock pottery on Wendat sites and interprets their occurrence as the result of allied interaction. Aligned with the Wendat against the Five Nations Iroquois, the presence of Susquehannock people at Wendat sites is documented historically and through the presence of Susquehannock-style pottery (roughly 10 percent at the Graham-Rogers site) (J.M. Wright 2006:56).

The diffusion, or emulation, of exotic pottery can lead to stylistically foreign pottery without a foreign potter. Several researchers have proposed this model (Trigger 1976:169; Dietler and Herbich 1989:161). Engelbrecht (1974) utilizes this view to explain the presence of Mohawk-like ceramics on Oneida sites. He claims that while travelling to Mohawk lands to trade for European goods, Oneida women were exposed to Mohawk ceramic attributes and brought new ideas back to Oneida (62). The heterogeneity of the Oneida ceramics and their similarity to the Mohawk vessels alongside the relative homogeneity of the Mohawk vessels seems to support his argument (Engelbrecht 1974:62). I. Smith (1970) notes the presence of sherds at Shenks Ferry sites that contain designs similar to Susquehannock pottery yet are made from local materials (33).

Syncretism refers to the combination of two traditions. Syncretic assemblages would theoretically be easier to identify then the other homologies; however, there is chance that a syncretic piece would be identified as a third style. Latta (1987) details a vessel found at the early- to mid-sixteenth century Parsons site in southern Ontario with a goblet-like stem, practically identical to a French Catholic chalice. As the material and technology of the cup itself indicate local origin, Latta states that the stem

was added in imitation of the French chalice and the resulting product put to ritual use (1987:717). Similar vessels were found in the Madisonville tradition, also proposed to be the result of syncretism, and a vessel similar to the Madisonville examples was found on a southern Pennsylvania Susquehannock site (Byrd Leibhart) implying either trade or migration (Kent 2001:377).

Problems with Variation Models

As alluded to above, there are numerous problems with these different models. While chemical analysis can differentiate between ceramic homologies and identities, between local and non-local clay sources, there is rarely information that can distinguish between different kinds of homologies or identities outside of researcher opinion. While each model has its flaws, the one that receives the most negative attention is the population exchange model.

The captive-bride theory is the main culprit as it is often critiqued. Researchers claim that the theory is based on historical analogy and is not necessarily applicable to prehistoric settings (Knapp 2009:120). Others claim that the only documentary evidence of captive brides in the historic period concern Iroquois capturing Algonquian brides; such evidence cannot account for foreign Iroquoian sherds on Iroquoian sites (Latta 1991:379). Knapp (2009) claims that unless there is evidence of violence, the captive-bride theory is not viable (121) while Bradley (2005) states that the theory is not viable if there is no evidence of blending between pottery types (60). Jamieson sums up the prominent view on this theory with the statement: "Would captives continue to signal their identity/ethnicity after they have been adopted into enemy families and expected to submerge previous identities? I think not" (Jamieson 1990:82).

James Lynch provides an in-depth analysis of Iroquoian adoption rituals towards non-Iroquois (1985) that could shed some light on this argument. Lynch states

that adoption was often conducted to replace population losses due to warfare, epidemics, or political fragmentation and followed a pattern dictated by Iroquoian cosmology. The adoption practice generally contains three key processes: the purgative, the transformative, and the integrative. In the first process, the individual is stripped of their identity and thrust into a liminal state as a non-person. They are then transformed back into a person in the transformative state, and finally given a new identity and integrated into the community in the final process (Lynch 1985:85). Lynch describes how these processes are tailored to the adoption of individuals and groups.

There are two types of adoption: assimilative and associative. Assimilative adoption leads the individual through all three of the processes described above and results in complete absorption into the group. This was often done to replace an individual loss, either through natural or violent means. Once adopted, the captive assumed the identity, status, rights, and obligations of the individual being replaced (Lynch 1985:86). The individual was expected to carry out successfully all obligations to the lineage; disloyalty to the new group or culture was severely punished (Lynch 1985:87). This fact appears to disprove almost entirely the captive bride theory for ceramic variation for, as Jamieson noted, newly adopted members of a group would not have been allowed to display their past cultural traditions.

Associative adoption, on the other hand, may provide an explanation for ceramic variation. In the associative process, the individual does not undergo the first or second process (purgative and transformation). They keep their initial identity and are given a second identity within the new group (Lynch 1985:88). Associative adoption is often conducted to cement economic or political ties or for honorary purposes (Lynch 1985:89). Individuals adopted in this manner would have been allowed to produce their traditional pottery. As marriage or population exchange falls

into this category of adoption, it is more likely that small percentages of foreign pottery found at sites would represent associative, rather then assimilative adoption.

Groups may also be adopted in either of these manners. Groups adopted via the assimilative method were most likely prisoners while those integrated into the community by the associative method were usually allies (Lynch 1985:90). The same criticisms of foreign pottery found for individuals apply here. Groups adopted assimilatively were separated and given to individuals throughout the tribe. While it is tempting to see larger percentages of foreign pottery as acts of resistance by captives, it is highly improbable. Groups adopted associatively, on the other hand, were highly likely to engage in their traditional customs, providing a better answer to the problem of foreign pottery in large quantities.

Dietler and Herbich (1989; 2008) further question the validity of the assumption that people who marry into a group (whether by choice or not) would continue to display their native affiliation through pottery style. They claim that researchers often overlook the possibility of significant post-marital resocialization which is quite common in patrilocal societies (Herbich and Dietler 2008:235). Although the majority of American Indian, particularly northeast Iroquoian and Algonquian, cultures were matrilineal and matrilocal, the arguments for resocialization can easily apply to studies that advocated patrilocal residence (Knapp 2009; Engelbrecht 1984; Trigger 1976).

Using the Luo, a patrilocal society in Africa, as their foundation, Dietler and Herbich (1989) demonstrate that, through a process of intense resocialization, local traditions can be perpetuated by a body of women almost all of whom come from outside of the community (150). The resocialization process involves the 'unlearning' of all things learned in the natal home and adapting to new practices and concepts (Herbich and Dietler 2008:233). As there is considerable pressure from village

women, particularly the new wife's mother-in-law, to adapt, women generally always conform to the local pattern (Herbich and Dietler 2008:233).

Other issues with these models stem from the backlash against the rigid culture-historical ceramic types assumed and propagated by the models. Engelbrecht (as cited in Kuhn 2007) states: "Assigning ethnicity based on pottery assemblages must be done with great caution because a direct correlation between archaeological cultures and actual ethnic groups does not exist" (322). Knapp (2009) writes against modeling cultures as bounded systems as such paradigms privilege the regional scale while obscuring local-scale variation, thus compelling archaeologists to identify vessels in a binary manner as either local or foreign (106). He continues by claiming that the idea of pottery as being equal to, or signifying culture places inappropriate boundary conditions on distribution (Knapp 2009:106).

Ceramic typologies are created with the assumption that every vessel will fit a certain style precisely, leaving no room for innovation. Thus, what might be a mere example of experimental or decorative freedom is attributed to a foreign group. Furthermore, societies and cultural styles are not rigid. Unfortunately, Iroquoian ceramic analysis has progressed little beyond the culture-history phase. For these reasons, and doubtless more, there are significant problems involved with making inferences concerning prehistoric social interactions based on ceramic design variability (Plog 1978:177-8).

The problem posed by foreign pottery on Iroquoian sites can be better defined by questioning where these pots were initially manufactured. If made at the site, they represent a ceramic homology; while those made in the area of another tribe would signify a ceramic identity. Trace element analysis of the clay and temper will answer this question. Once pottery has been defined as either an identity or homology, the researcher must base further analysis on context and subjective interpretation as the

hypotheses described within these two processes generally produce similar results. Contextual analysis would undoubtedly aid in comprehension. At the very least, differences in domestic/refuse and mortuary contexts can enlighten researchers on the role of exotic pottery in the community. It is possible to decipher the enigma posed by foreign pottery on Iroquoian sites once one gains a complete understanding of the instrumental and adjunct form of said pottery.

Application to Proto-Susquehannock Study

It is clear that there are multiple ways in which different pottery types may accumulate at a site. This simple fact must be remembered when focusing on the interpretation of ceramics from Proto-Susquehannock sites. The three types of pottery thought to represent Susquehannock culture are all found on multi-component sites and are generally contemporaneous. The range of percentages of these pottery types, from less than half one percent to over eighty percent, indicates different processes of accumulation. Sites with smaller percentages could easily represent ceramic identities, particularly as a result of trade, while those with larger percentages are more likely to represent true occupation.

Distinguishing between these possibilities is difficult. The basic lack of a comprehensive definition of these types makes interpretation nearly impossible while the lack of a solid context for many sherds further compounds the problem. Scientific tests such as PTSA or INAA may provide some insight, allowing researchers to determine if the sherd represents a ceramic identity or homology. Researchers must remember that there are other methods besides occupation which could result in the presence of a certain type of pottery at a site. Thus, these sites cannot be labeled Proto-Susquehannock simply because pottery associated with the group is present.

CHAPTER 6

CONCLUSIONS

The Upper Susquehanna River Valley region is undeniably an important piece of the Susquehannock puzzle, yet is relatively unknown archaeologically. The forty-five sites described represent those that past researchers have deemed the most likely to contain evidence of Proto-Susquehannock peoples based primarily on ceramic seriation. Are these sites actually Proto-Susquehannock? There are several issues that prevent any definitive statements on this issue.

The first is definitional: the terminology used to interpret the cultural sequence and ceramic seriation model is not concrete. The term protohistoric is used in a variety of ways, often contradictory ones, by both regional and national scholars. Without a concrete definition, the use of the term merely hampers interpretation rather than enhancing temporal clarity. The terms protohistoric Susquehannock and Proto-Susquehannock suffer from similar issues. The etymology of the terms infers separate meanings, yet they are often used interchangeably or synonymously. The loose definitions of the three main pottery types in this region -- Richmond Mills Incised, Proto-Susquehannock, and Schultz Incised -- compounded by the structural and decorative similarities of the types, leads to a different interpretation of each by individual researchers. Although unsound, the differentiation between these types has become the primary method of determining the presence of Susquehannock people. It is difficult to describe the sites analyzed as Proto-Susquehannock when the term itself and the main artifact type used to define it are vague and interpretively non-operational.

A primary issue that must be addressed concerns the basic cultural traits that are thought to distinguish the Susquehannocks. What does the term Susquehannock

truly mean? Through the past culture-history view, the Susquehannocks are identified through the presence of various items including marine shell artifacts, copper alloy spirals, and especially shell-tempered pottery. To state that any site that includes one of more of these traits is Susquehannock based only on the presence of an object is to completely disregard the interconnectedness of American Indian societies and to infer that trade and social interactions did not occur.

It is difficult, particularly in the Upper Susquehanna River Valley, to identify the Susquehannocks archaeologically through the use of these three "cultural indicators". Many sites in the area deemed Susquehannock or Proto-Susquehannock contain only a small percentage of shell-tempered pottery that are more likely to represent trade than occupation. As the previous chapter demonstrates, there are numerous reasons why ceramics from a non-occupational culture could be present at a site and researchers should not blindly assume that the presence of Susquehannock pottery equals Susquehannock presence. A revision of this system would be difficult, yet necessary to fully understand the depositional history of these sites and the Susquehannocks.

Are the sites Proto-Susquehannock? I believe it is too early to make a definitive statement. A revision of the culture-history model of the Susquehannocks is necessary as well as further excavations and research in the region. The lack of any single-component site as well as the presence of Schultz Incised pottery, compounded by the definitional problems mentioned above, obfuscates the question. However, due to the geographical placement of the sites at a convenient time period, as well as the presence of Susquehannock material culture (though debatable in some cases), it is probable that this area does represent a Proto-Susquehannock usage. Whether this represents long-term occupation, short-term usage, or trade is unknown and will require further investigation.

More questions have been raised than answered. There are many routes that future research may take, although I feel that some issues must be addressed. Terminology needs to be concretely and operationally defined and adhered to uniformly by all researchers, particularly with regard to ceramic typology. Once defined, the pottery assemblages from these sites must be re-analyzed, preferably by one individual or group of interacting researchers to ensure consistency. Once concluded, a complete analysis of the pottery types and percentages at these sites is necessary to understand the relationship between the types and peoples associated with them.

The European trade objects recovered deserve more attention as they are the main dating source at these sites. By fixing a date for these items, researchers may be able to determine when exactly the Susquehannocks were in this region and clear up hesitations regarding the timing of their migrations. Settlement pattern in the region should also be studied. Dramatically different from the lower Pennsylvania Susquehannock sites, the dispersed settlement pattern found in this region, as well as the possible local or non-local burial practices observed, complicates interpretation of Susquehannock society, particularly concerning population size.

Finally, and perhaps most importantly, the region must be re-visited by professional excavators. This area has the potential to provide a substantial amount of information to Susquehannock history, yet it has been largely ignored throughout the past forty years. Professional excavations in this area, and along the proposed southern migration route, could provide a wealth of knowledge if undertaken. Furthermore, professional analysis of private and institutional collections is also essential. Interviewing collectors, many of whom are elderly, should be a prominent goal as their knowledge of area sites, mostly unwritten, is soon likely to be lost.

In conclusion, the Upper Susquehanna River Valley region must be re-analyzed. Although the evidence is not always definitive, it is quite possible, perhaps even probable, that these sites represent Proto-Susquehannock occupation. This area has the potential to reveal much about Susquehannock history and should not continue to be overlooked.

APPENDIX

BIBLIOGRAPHY BY SITE

Area	Site Name	References
Athens, PA 36Br--	1: Tioga Point Museum	Murray 1921
	2: Murray Garden	Kent 2001; Murray 1921; Twigg 2009a; Tioga Point Museum
	3: Tioga Point Farm	Kent 2001; Lucy 1991; Lucy 1979; Murray 1921; Tioga Point Museum
	5: Murray Farm	Griffin n.d.; Kent 2001; Moorehead 1938; Murray 1921; Twigg 2010; Tioga Point Museum
	6: Queen Esther's Flats	Moorehead 1938; Murray 1921; Tioga Point Museum
	17: Macafee Flats	Murray 1921
	27: Spanish Hill	Funk 1993; Griffin 1931; Griffin n.d.; Hunter 1959; Kent 2001; McCracken 1985; Moorehead 1938; Murray 1921; Murray 1931; Twigg 2005; Twigg 2009b; Twigg 2010; Susquehanna River Archaeological Center Tioga Point Museum
	28: Clapp Farm	Tioga Point Museum

	5/41: Thurston Farm	Griffin n.d.; Kent 2001; Twigg 2010
	42: Ahbe-Brennan	Griffin n.d.; Kent 2001; Twigg 2010; Tioga Point Museum
	43: Kennedy	Casterline 1974; Kent 2001; Lucy n.d.; I. Smith 1977; Susquehanna River Archaeological Center; Tioga Point Museum
Wysox Township 36Br--	58: Wilson	McCann 1962; Witthoft n.d.
Franklin Township 36Br--	176: Pepper II	McCracken 1989; Tioga Point Museum
Sheshequin Township 36Br--	83: Blackman	Herbstritt 1988; Lucy 1985; McCracken 1989; I. Smith 1977
	14 & 15: Judge Gore Farm and Nagle Farm	Moorehead 1938; Murray 1921; Witthoft 1959; Witthoft n.d.; Tioga Point Museum
Towanda Township 36Br--	50: Sick	Lucy 1985; Witthoft n.d.
Owego, New York	River Street	Crannell 1970
Nichols, New York	SUBi-300: Engelbert	Beisaw 2006; Beisaw 2007; Beisaw 2008; Beisaw 2010; Caister 2007; Crannell 1970; Dunbar 1974; Elliot 1970; Lipe 1976; Reinhart 2000; Semowich 1980/1; Stewart 1973; Versaggi 1996; Tioga Point Museum

	Kuhlman/Kahlman	Beisaw 2007; Crannell 1970
Waverly, New York	30Ti24: Ellis Creek	Lucy 1950
Luzerne County 36Lu--	1: Schacht	Kent 1970; Kent 2001
	14: Parker	Kent 1970; Kent 2001

For those sites without listed sources, information is derived from personal communications with researchers or collectors, or Cultural Resource Geographic Information System (https://www.dot7.state.pa.us/ce/login.asp) through the Pennsylvania State Department.

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