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Author(s): Bradley J. Parker

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TOWARD AN UNDERSTANDING OF BORDERLAND PROCESSES

Bradley J. Parker

Although the study of frontiers is of fundamental importance to a variety of academic fields and subdisciplines, few researchers have proposed terminology, models or conceptual frameworks that allow a cross-disciplinary supra-regional comparison of frontier dynamics. In this paper I take three steps toward rectifying this situation. First, I propose a simplified lexicon that is widely applicable across disciplinary, temporal and regional divides. This lexicon is meant to be a starting point in defining boundary situations. Second, lay out a model, called the “continuum of boundary dynamics.” This model is meant to aid researchers in characterizing various types of boundary situations. And third, propose a model, called the “borderland matrix” with which to visualize the dynamic interaction between different categories of boundaries. This model is meant to aid researchers in isolating processes that occur in borderlands. It is my position that only through systematic comparisons of boundary situations at various times and locations can we hope to understand the processes that take place in borderlands. By defining and characterizing boundary situations and then isolating the processes taking place there, I believe that we will come much closer to understanding the common and unique themes that make frontier studies a central interregional and interdisciplinary subject of study.

Aunque el estudio de fronteras es de fundamental importancia para una variedad de campos académicos y sub-disciplinas, pocos investigadores han propuesto terminología, modelos o los conceptos fundamentales que permitan una comparación supra-regional multidisciplinaria de dinámicas fronterizas. En este ensayo yo tomo tres pasos para rectificar esta situación. Primero, propongo un léxico simplificado que sea extensivamente aplicable a través de disciplinas y de divisiones regionales y temporales. Este léxico tiene el propósito de ser un punto de partida para definir las situaciones fronterizas. Segundo, esquematizar un modelo llamado “continuo de dinámicas limitantes.” El propósito de este modelo es el de ayudar a investigadores a caracterizar varios tipos límites fronterizos. Y el tercero, propone un modelo, llamado la “matriz fronteriza” con la cual se puede visualizar la interacción dinámica entre diferentes categorías de límites fronterizos. Este modelo está diseñado para ayudar a investigadores a aislar los procesos que ocurren en zonas fronterizas. Es mi posición que sólo a través de comparaciones sistemáticas de situaciones fronterizas, en diferentes tiempos y ubicaciones que esperamos entender los procesos que suceden en zonas fronterizas. Definiendo y caracterizando las situaciones de la frontera y aislando los procesos que suceden ahí, que vendremos mucho más cerca a entender los temas comunes y extraordinarios que hacen los estudios fronterizos un sujeto central de estudios interregionales e interdisciplinarios.

Constructing an Interdisciplinary Approach to Frontier Studies¹

Frontiers are areas between. They are places at the edge of cultural spheres and therefore embody the loci within which culture contact takes place. Like other types of boundaries, frontiers come into being as a result of particular historical circumstances or processes and are thus unique social phenomena. Nearly all parts of the world were, at some point in their history, in some way connected to, or defined by, a frontier. Furthermore, since the nature of interaction taking place in frontiers can be influ-

enced by a variety of geographic, political, demographic, cultural, and economic factors, frontiers are extremely dynamic and often unstable zones that exhibit a marked degree of variability through space and time.

Several recent attempts to summarize the state of what is often termed “frontier studies” recount its importance to many academic disciplines while at the same time, whether intentionally or unintentionally, illustrating the intellectual divide separating scholars both within anthropology and between anthropology, history, and archaeology (Anderson 1996; Donnan and Wilson 1994; Green

Bradley J. Parker ■ Department of History, University of Utah, 380 S. 1400 E. Rm. 211, Salt Lake City, UT, 84112 (Bradley.J.Parker@utah.edu)

and Perlman 1985; Kopytoff 1987a; Lightfoot and Martinez 1995; Parker 2002; Parker and Rodseth 2005; Rice 1998; Rösler and Wendl 1999; Wilson and Donnan 1998). It is a simple fact that although frontier studies are fundamental to a variety of academic fields and subdisciplines (geography, political science, history, anthropology and archaeology, for example), each has typically held fast to its own discourse on the topic, and only rarely has research in any field been informed by cross-disciplinary discussion or comparison. In spite of the fact that the study of frontiers is unique in its cross-disciplinary and multiregional appeal, few researchers have explicitly addressed this issue by proposing models that can be applied across spatial, temporal, and disciplinary divides. One of the reasons that interdisciplinary comparison of this, or any topic, is relatively rare is because such comparisons introduce a multitude of problems. Diverse sources, methodologies, goals, and theoretical frameworks are just the beginning of the evils to escape the Pandora's box of interdisciplinary study once it is opened. These difficulties are particularly acute in archaeology. One of the impacts of postprocessual theory has been to stigmatize modeling and discourage broad comparison. However, if we are to begin to understand the mechanisms of cultural processes we must return to comparative research, both within archaeology and between archaeology and other disciplines. For this reason, as scholars of specific fields, regions, and subdisciplines, we must ask ourselves two things. First, what would a cross-disciplinary or interregional comparison of frontiers hope to achieve? And second, how should we go about addressing the methodological difficulties that are inherent in this kind of comparison?

On the issue of methodology: inasmuch as many of us would like to become well versed in regions outside of our own, considering the demands of modern academic life, this is, in most cases, unrealistic. Thus, unless we are each to become a Jack-of-all-disciplines, it is essential to create a platform upon which common themes can be analyzed and discussed across disciplinary and/or regional divides. The first goal of this paper is to reintroduce such a platform, called "the Continuum of Boundary Dynamics" (Parker 2002), upon which to characterize various frontier situations and in doing so bring them into comparative focus.

But what is the point of widening our view from our own specific studies to contribute to a body of work that is accessible to scholars of various fields, regions, and subdisciplines? This reaches the core of what frontier studies should hope to address. Through the comparison of various boundary situations, the overall goal should be to define the mechanisms behind, or factors contributing to, frontier dynamics. With such an approach, we should seek to understand how the dynamics of various types of boundaries affected both the core area by which it is defined, and how core dynamics affected the boundaries. Through the comparison of various specific frontier situations we should define common and unique themes in frontier studies, and, by characterizing and analyzing these themes, we should begin to build models within which to understand the nature of boundary processes (Parker 2002:372). *Boundary processes*—the finite, if complex, set of dialectic interactions that take place in contact zones—this is what bridges our fields, regions, and subdisciplines and makes us all students of the frontier. It is an understanding of these processes that cross-disciplinary and interregional comparisons of frontiers can hope to achieve. The second goal and main purpose of this paper will be to introduce a new model with which we can begin to isolate, analyze, and hopefully, more fully understand the processes taking place in frontier situations.

Boundaries, Borders, Frontiers and Borderlands

Such an agenda must begin with definitions. Although I have previously addressed the issue of definitions (Parker 2002:372–375; Rodseth and Parker 2005), I feel that it is important to reiterate my position. My intention here is not to review all of the various different ways in which scholars have approached these terms (summaries—from various points of view—can be found in many of the major works in frontier studies including: Anderson 1996; Donnan and Wilson 1994; Elton 1996b; Klein 1996; Kratochwil 1986; Lamar and Thompson 1981; Parker 2002; Parker and Rodseth 2005; Rice 1998; Rösler and Wendl 1999; Wilson and Donnan 1998 among others), but instead to *simplify* the terminology and propose a more generalized and widely applicable lexicon. I will therefore focus on

what I see as key aspects of the various terms, knowing full well that at this level of generalization some of the particular nuances of specific frontiers may need further explanation.

The terms *boundary*, *border*, *frontier*, and *borderlands* mean many things to many people. Hugh Elton has pointed out that the vocabulary used in modern scholarship to refer to various types of boundaries adds to the problem of defining such phenomena in the ancient world. He observes that even though we distinguish in English between *borders* such as those of a modern nation state, and *frontiers* which he defines as transitional zones, such distinctions do not exist, for example, in Spanish where the term *frontera* refers to both borders and frontiers (Elton 1996a:127; also see Kristof 1959). It is this potential for the confusion of terms in the modern world that makes it imperative for us to agree on a unified terminology. And for this reason it is essential to situate the term *frontier* in relationship to the closely related terms *boundary*, *border*, and *borderlands*.

In the introduction to *Untaming the Frontier*, Lars Rodseth and I proposed that we should use the *Oxford English Dictionary's* definitions of the existing English terms as a starting point for addressing this issue. Although I would suggest that the terms *boundary*, *border*, *frontier*, and *borderlands* are in no way synonymous, the fact that they are often used interchangeably shows that the relationship between them is often blurred.² This situation both emphasizes the need for more refined definitions and at the same time shows that there is indeed room for some scholarly license in defining the nuances of these terms.

Boundary, most would agree, is the most general of these terms (although see Anderson 1996 and Jones 1959). The *Oxford English Dictionary* defines *boundary* as “that which serves to indicate the bounds or limits of anything.” This rather generic definition fits well, I believe, with the vernacular use of the word. Boundaries are unspecific divides or separators that indicate limits of various kinds (Barth 1969, 1994; Cohen 1985, 1994; Rösler and Wendl 1999:8). With this definition in mind, it is logical to deduce that when thinking on a regional scale, this term encompasses the more specific terms *border* and *frontier* (Anderson 1996).

I have previously defined *borders* as “linear dividing lines, fixed in a particular space, meant to

mark the division between political and/or administrative units” (Parker 2002:373). Wendl and Rösler refer to the modern nature of borders saying that this term pertains specifically to international boundaries between modern nation states (Wendl and Rösler 1999:8; also see Hamilton 1999; Kopytoff 1999; Wilson and Donnan 1998; Rothman 2004). Again, I feel that this definition fits well with the vernacular use of the word; when one leaves one country to enter another, one crosses the “border” that is a tangible line between separate political or administrative entities. However, borders of modern nation states do not necessarily govern other types of boundaries. For example, national borders often do not mark a division between ethnic or linguistic groups. In fact, Wilson and Donnan have exemplified many situations in which cross-border relations have been instrumental in shaping transnational (or trans-border) identities (see the case studies in Donnan and Wilson 1994; Rösler and Wendl 1999; Wilson and Donnan 1998; also see Anderson and Bort 1998; Pavlakovich-Kochi et al. 2004). Thus, one might say that although borders are, like all boundaries, a type of division, the weighting characteristic of borders is that they mark political, administrative, and in most cases also military, boundaries. Other boundaries, instead of *corresponding* to political borders, are *conditioned*, in a variety of ways, by them.

This then brings us to the term *frontier*. Thompson and Lamar have defined a frontier as “a zone of interpenetration between two previously distinct peoples” (Thompson and Lamar 1981:7 [this definition follows from Lattimore 1962]; also see Kristof 1959; Lightfoot and Martinez 1995; Rice 1998). I have added to this the idea that such a zone could separate various types of political or cultural units and that such zones may also be made up of empty areas where no such units exist or where they do not come onto direct physical contact (Rösler and Wendl’s “external” and “internal” frontiers; Parker 2002:373; 2001:263–268; see also Elton 1996b:127). This position is underscored by Lattimore’s statement that, in spite of the great effort that went into constructing China’s Great Wall, “The linear Frontier never existed [in China] except in concept” (Lattimore 1962:115).

The key characteristic that makes the concept of the frontier an interesting frame for anthropo-

logical research is the idea developed by Hugh Elton that frontiers are composed of various types of boundaries (Elton 1996b). In his exemplary study of the Roman frontier, Elton defines frontiers as zones of variously overlapping (but not congruent) political, economic, and cultural boundaries (Elton 1996b:3–9; also see Parker 2002). The various types of boundaries discussed in the literature on frontiers in various fields, and the fact that many scholars emphasize the interconnectedness of such boundaries in the make up of specific frontiers (Lightfoot and Martinez 1995), supports Elton's view of a frontier as a zone where various types of boundaries intersect and overlap (see, e.g., Alconini 2005; Aron 2005; Eaton 1993, 2005). This concept is instrumental to the models proposed in this paper. If we acknowledge that frontiers are made up of various types of boundaries including, for example, geographic, political, demographic, cultural, and economic boundaries, then the concept of the frontier is freed from the uni-causal conundrum that so fatally ensnared Turner (1920). In fact, it could be said that it is precisely this complicated matrix of overlapping boundaries that is the very essence of frontiers.

The term *borderlands* is much more problematic than the terms discussed so far, largely because it is defined differently by anthropologists and historians. The *OED* defines *borderlands* as “the land or district on or near the border between two countries.” In line with this definition, cultural anthropologists are focusing on borderlands as regions where new communities have developed/are developing across or around, and most importantly, because of, modern international borders (Alvarez 1999, 1995; Donnan and Wilson 1994; Flynn 1997; Hansen 1981; Martinez 1994; Pavlakovich-Kochi et al. 2004; Rösler and Wendl 1999; Wilson and Donnan 1998). This very fruitful new subfield of anthropology obviously has a great contribution to make both to anthropology as a whole and to other fields such as history and archaeology. In fact, the emphasis it places on the creation and maintenance of identity has many implications for the study of the ancient world (Dodd 2005).

Reacting to the stigma attached to the term *frontier* in the backlash against the Turner Thesis (Turner 1920), Western historians have recently proposed to distinguish between *frontiers* that they define as “meeting place of peoples in which geo-

graphic and cultural borders were not clearly defined” (Adelman and Aron 1999:815) and *borderlands* that describe “the contested boundaries between colonial domains” (Adelman and Aron 1999:816; Aron 2005). The common denominator between the use of the term *borderlands* by both anthropologists and historians is the idea that *borderlands* define a geopolitical space.

In my previous work I have been hesitant to use the term *borderlands* for several reasons. First, with anthropologists already using this term to describe what is fast becoming a new subdiscipline (Alvarez 1999, 1995), I saw no need to confuse the situation by borrowing the term for other purposes. And second, its definition in the *OED* and the fact that it includes the word *border* betrays its close association with the linearity and rigidity of *borders*, which I believe rarely, if ever, existed in the ancient world (although see Smith 2005). Nevertheless, I acknowledge the usefulness of the term and thus include it in the overall lexicon here proposed. However, readers should keep in mind that this term is used in various ways depending upon the field and subdiscipline.

To be clear then, *borderlands* in the sense utilized here refers to regions around or between political or cultural entities—the geographic space in which frontiers and borders are likely to exist (Wendl and Rösler 1999:8–10). This leads us to an interesting point. If we follow this definition we can say that there are two types of boundaries (or better, *boundary sets*) that may occur in borderlands: borders and frontiers. This allows us to distinguish a slightly more nuanced definition of *borderlands* and at the same time move toward an understanding of the nature of the processes that occur in such areas. *Borderlands* as defined here are regions around or between political or cultural entities where geographic, political, demographic, cultural, and economic circumstances or processes may interact to create borders or frontiers.

Characterizing Boundaries that May Occur in Borderlands

If we follow the *Oxford English Dictionary* and consider the term *boundary* to describe all categories of limits or divides—*border* to be a linear, static dividing line, and *frontier* to be a dynamic, fluid zone—two important relationships come into

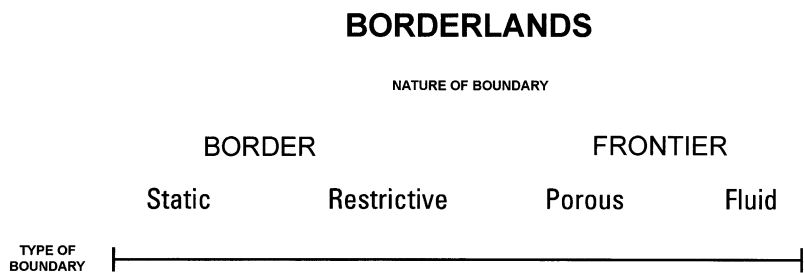


Figure 1. A continuum showing the interrelationships between borderlands (territories or regions around or between political or cultural entities), borders (linear dividing lines fixed in a particular space) and frontiers (loosely defined areas or transition zones that lie between political or administrative entities or between one such entity and a hinterland), and boundaries (unspecific divides or separators that indicate limits of various kinds) (Parker 2003).

focus. First, borders and frontiers are made up of various types of boundaries (i.e., geographic, political, demographic, cultural, and economic). They are in fact *boundary sets*. And second, in their most extreme manifestations, *borders* and *frontiers* are opposite types of divides—the first hard, static, and linear and the second soft, fluid, and zonal. However, as social scientists we all know that data rarely if ever fit neatly into typological categories. In fact, a review of the literature on this topic shows that there is considerable variation between various types of boundaries and between specific frontier situations. To deal with this variation, I have previously proposed that boundary diversity can be categorized by juxtaposing *borders* and *frontiers* on a continuum with the static, linear border on one end and the dynamic, fluid frontier on the other. The continuum starts with the most extreme variation of the static border on the far left. This type of boundary is a spatially restricted border or line of separation that can be described as static or closed. This is juxtaposed with the most extreme version of the fluid frontier on the far right. This type of boundary is a zone that is spatially expansive and can be described as dynamic or open (Parker 2002:374). Combining these distinctions with the concept of *borderlands* described above produces the paradigm shown in Figure 1.

In the above discussion, I highlighted the importance of the multidimensional aspect of frontiers described by Elton. Elton sums it up this way, “even the idea of a simple frontier zone needs to be expanded to that of multiple zones since not all types of activity can be bounded in the same way” (Elton 1996b:113). Borders and frontiers may thus be considered *boundary sets*; that is, they are made

up of multiple, overlapping boundaries. A complete analysis of any particular boundary must therefore include various categories of data. In order to allow for this variation I have previously proposed five categories of data that can be applied to the Continuum of Boundary Dynamics: geographic, political, demographic, cultural, and economic (Parker 2002). I envision the character of each of these categories of data being measured as separate yet interdependent lines on the continuum. I refer to this model as the “Continuum of Boundary Dynamics” (Figure 2 and Parker 2002:374). This model allows for a more nuanced analysis of the various boundaries that might occur in borderlands. In this system one might, for example, characterize a particular boundary as geographically and politically restrictive but economically porous, demographically fluid but politically static, etc. In my analysis of Assyria’s Anatolian frontier during the Mesopotamian Iron Age (ca. 900–600 B.C.), for example, I argued that Assyria’s political and military control over the region, which penetrated nearly all aspects of frontier society, made this a politically restrictive zone. However, some of the same forces that caused this region to be politically restrictive contributed to its demographic and cultural porosity. The geography was also, I argued, quite restrictive, but at the same time geography played a key role in the porous economic character of the area (Parker 2001, 2002).

Although the Continuum of Boundary Dynamics is, I believe, a good step toward characterizing borderland situations, it is not without problems. One problem with this model is that the variables measured on the continuum (geographic, political, demographic, cultural, and economic) are very gen-

basic data categories and subcategories, keeping in mind that this discussion is not meant to be comprehensive but is instead illustrative of how specific boundaries might be broken down.

Geographic Boundaries

This category is meant to refer to the natural divisions, physical character and climate, in or around a borderland or between a borderland and the core polity or polities by which it is defined. This may include, for example, the presence or absence of prominent physical features such as rivers or mountain ranges, the type of, or variation in, weather patterns including precipitation and temperature, the composition of the soils and availability of ground water, the types and densities of vegetation and the distribution of natural resources.

Characterizing the physical geography of a region under study is important for several reasons. Early geographers such as Curzon (1907) and Holdich (1916) envisioned the limits of ancient polities as being determined by constraining geographic features such as rivers and mountain ranges (Pounds 1951). Although in some sense it is logical to assume that physical features may have acted to restrain activity across a borderland, various scholars have shown that the presence of such features may also have aided or even provided impetus for movement into such an area. Whittaker, for example, has shown that rivers like the Rhine, the Danube, and the Tigris were primarily lines of communication during the Roman period, even though they were recognized (by most) to be the “border” of Roman power (Isaac 1990; Whittaker 1994). I have discovered a similar phenomenon in the Upper Tigris River region during the Assyrian Iron Age (ca. 900–600 B.C.) when the Assyrians used the river both as a defensive barrier in times of impending attack, and a transportation corridor for the shipment of raw materials such as timber and surplus agricultural products (Parker 2001).

In addition to constraining movement, the presence of a mountain range through a borderland, for example, also means that there is likely to be a contrast in ecological zones within the region or between the borderland and neighboring areas. Some ecological zones might harbor resources desirable in the core polity. Such resources could be in the form of natural flora and fauna as was the case in North America during the colonial period

when the fur trade gave impetus to the movement of European explorers into the American interior (see especially Wishart 1977; also see Cook 1981; Hinderaker 1997; White 1991 and below under “Economic Boundaries”). Another example can be found during the Mesopotamian Iron Age when Assyria’s movement into highland Anatolia was, at least in part, conditioned by the need to procure timber and other resources (Parker 2001:206–208).

The distribution of sources of metals and precious or semiprecious stones might also contribute to the character of a boundary zone. Thompson and Lamar (1981), for example, have argued that the presence and distribution of diamond sources greatly contributed to the method and pace of the boundary processes in South Africa, and Yener has shown the importance of Anatolia as a metal source area for Mesopotamia through much of its history (Yener 2000).

The exploitation of natural resources may result in a significant alteration of the natural environment. Such alterations may be evidenced in the archaeological record by changes in archeobotanical assemblages and shifts in subsistence patterns. In southeastern Turkey at the site of Kenan Tepe, for example, wood and wood charcoal give way to dung as the most common cooking and heating fuel, suggesting that the destruction of Anatolia’s forests was well underway during the Early Bronze Age (Parker et al. 2003; see also Yener 1982). This borderland situation is underscored by documents from the Assyrian Iron Age that confirm that, at least by the reign of Sargon II (721–705 B.C.), Assyrian administrators had to travel far into enemy territory to acquire logs suitable for construction projects taking place in the Assyrian heartland (Parker 2001:227–230).

Political Boundaries

This category is meant to encompass political, administrative, and military boundaries. Since most boundaries are defined by their relationship to one or more cores, this category plays a particularly important role in defining the characteristics and dynamics of borderlands and for this reason it is perhaps the most commonly discussed manifestation of boundaries. However, the subcategories encompassed here are obviously deeply intertwined and thus it may be difficult, or in some cases impossible, to distinguish between them. Such a distinc-

tion is nevertheless important since it might give us insights into the political dynamics taking place at a particular time in a specific borderland. A core might, for example, project military power into a borderland for strategic, economic, or ideological gain without ever intending to establish political or administrative control. If holding some sort of political dominion over an area is the goal, then such dominion might take the form of indirect, or hegemonic, rule (D'Altroy 1992; Hassig 1985, 1988, 1992). In this case, political control may ultimately be held by the core, but the administration of that control might be left to a subordinate political entity such as a vassal state. In other cases, a core may choose more invasive measures that can result in the colonization of a borderland. Such colonization can eventually lead to the complete annexation of such an area and the "closing" or shifting of the frontier (Aron 2005). The point here is that although these subcategories are interrelated and may therefore work in tandem, an analysis of the interplay between them is an important interpretive tool.

The Assyrian empire made extensive use of indirect rule especially in logistically difficult locations where existing state-level polities offered the opportunity for indirect exploitation through an existing administrative system. Assyrian domination over its vassals is illustrated well by its relationship with Kumme, a state located in the far southeastern corner of modern Turkey near the modern city of Zakho (Parker 2001; but see also Postgate 1973 and Liverani 1992). Assyrian letters show that, although the daily operation of state was left to the Kummean royal family, the Assyrians had free reign, not only to demand regular tribute payments in the form of luxury goods and staple products, but also to exploit natural resources in Kummean territory (Lanfranchi and Parpola 1990: 69–87; for analysis see Parker 2001:89–94). To ensure that the vassal states lived up to their obligations to Assyria, "royal delegates" were assigned to monitor activities and protect Assyrian interests in peripheral regions. Besides ensuring the cooperation of the Kummeans, one of the most important jobs of the royal delegate in Kumme was to gather military intelligence about Assyria's enemies. To this end Kumme's delegate, a certain Aššur-resuwa, had a network of spies or informants called *daialu* who kept him apprised of occurrences in rival states. This example illustrates that indirect rule may be

used to administer frontier regions even when such administration does not involve the use of military force or the establishment of new political boundaries.

Since indirect rule only alters the administrative structure of a frontier region and may not involve significant political reorganization or military intervention, this type of boundary may be very difficult to define in the archaeological record. In his study of the Urartian empire, Zimansky (1995) notes that throughout the empire, but especially in frontier regions, Urartian material culture (ceramics, architecture, and metal artifacts) is largely restricted to Urartian defensive and administrative sites. The creation of the empire out of a multitude of ethnic groups appears to have had little effect on the material culture of most of the empire's subjects. A similar phenomenon has been noted in parts of the Inca empire (Morris and Thompson 1970).

The attempt, whether successful or not, to integrate a borderland into the political or military system of a neighboring core can be manifest in the archaeological record in a variety of ways. The activities of one or several military forces inside a boundary zone might appear in the archaeological record as destruction layers or destroyed or abandon sites. Longer-term military presence may entail the construction of military infrastructure such as fortresses or garrison centers (Parker 1997a). The most obvious manifestation of military boundaries is perhaps the creation of the Roman *limes*. These frontier defenses acted as the front line of Roman military defense, even when administrative or political boundaries reached beyond, or fell behind them (Isaac 1990).

Frontier military facilities are most likely to be located in strategic positions. The construction and maintenance of transportation and communication corridors as well as permanent administrative centers are important steps in establishing military control over a borderland and are often prerequisites to shifting political boundaries. Generally speaking, one would expect the material culture in and around such facilities to be reminiscent of the core, although the overall make-up of the material assemblages across the archaeological landscape is not likely to show significant changes unless large-scale population shifts occur or in cases where considerable time-depth is at issue (Zimansky 1995).

In a recent study of the Upper Tigris River valley in southeastern Anatolia, I suggested that an Assyrian policy that I call “agricultural colonization” was responsible for significantly altering the archaeological landscape of the valley (Parker 2003, and see below under “Demographic Boundaries”; note the parallels with Lewis 1985). This policy included the establishment of a significant number of new settlements in the hinterland around and between Assyrian military strongholds. The existence of these rural settlements implies more than just the military domination of the region. Assyrian texts show that, once the empire established military control of an area, the process of the consolidation of that control included erecting a complex administrative apparatus. Although the provincial governor held the highest ranking position on the provincial administration, direct administration of the population was in the hands of a large number of low-ranking officials known as “village managers.” These officials kept careful control of the taxable revenues, corvée labor, and probably also legal disputes. The invasive nature of Assyrian provincial administration meant that, unlike areas where the empire governed through vassal states, military, political, and administrative systems interacted to significantly alter the archaeological record.

Demographic Boundaries

I use “demography” here in the very broadest sense of the term, that is, anything having to do with people. Thus, this category includes the presence, distribution and interaction of various ethnic groups as well as the number, health, and gender of populations. Some scholars have defined frontiers in terms of demographic shifts, arguing that a frontier is itself characterized by the influx of settlers or pioneers to a sparsely populated hinterland (Turner 1920; also see Kopytoff 1999). In my opinion, using a demographic shift, especially one that is unidirectional, as *the* defining feature creates a core-centered view of boundary situations that is far too rigid. Instead, I believe that demographic shifts can and often do play an important role in boundary dynamics, but this is not necessarily so. Furthermore, the character of such demographic shifts can take many forms—it is not always characterized by unidirectional migration. Nevertheless, it is important to evaluate, inasmuch as it is

possible, the demographic makeup of a borderland and to attempt to gauge how such a makeup does or does not change over time (Lefferts 1977; Zadok 1995).

Demography as defined here can be explored through philological, ethnohistorical, and archaeological means, and with enough data, sophisticated demographic analysis can be applied to frontier populations (Lefferts 1977). Several Near Eastern scholars have successfully used onomastic and prosopographic data to evaluate the ethno-linguistic character of Mesopotamia in various periods (e.g., Zadok 1989, 1995, 2002), and ethnohistory has been particularly helpful in reconstructing the ethnic landscape in the Andes (Stanish 1989).

In most cases even remote frontier regions are populated, if sparsely, by one or more groups of people (although see Rodseth 2005). It is also true that boundary processes often involve the movement of people—usually visible in the archaeological record as changes in settlement patterns. However, such shifts might include the migration of one or more exogenous groups into or through a borderland (Aron 2005; Hinderaker and Mancall 2003; Lattimore 1962:307–324; Turner 1920, for example), the migration of one or more indigenous groups within or out of a borderland (Deagan 1985, and see other studies in Fitzhugh 1985, for example), the demise of one or more indigenous groups within a borderland (Faragher 1998; Hill 1998; Palka 1998; Turner 1985, for example), or the creation of new ethnic groups within a borderland (Hill 1996; Roosens 1989; Rodseth 2005; Rice and Rice 2005, for example).

The inward migration of exogenous Euroamerican settlers, especially as articulated by Turner (1920), is the social context that shaped much of the historiography of the North American frontier experience. It is true that such inward migration certainly had a reorienting effect on frontier demographics. However, outward migration and/or the demise of indigenous peoples—often due to war or disease (Dobyns 1993; Farnsworth 1989; Hill 1998; Hinderaker and Mancall 2003; Palka 1998; Sundstrom 1997)—may also be a key component in many frontier situations. Hickerson (1997), for example, has shown that well before significant European settlement, epidemic diseases in eastern Texas brought on by European contact resulted

both in the depopulation of some areas and internal shift and population coalescence in others. In many parts of Africa, disease traveled the reverse path—it struck the colonial population rather than the indigenous peoples (Pagaard 1986), slowing the pace of inward migration and often restricting the location and function of colonial settlement (McNeill 1976). Pearson's (1997) study of the colonial period in Madagascar demonstrates that the effects of exogenous penetration into a frontier region are far from uniform or predictable. Although settlement shifts are recognized during the era of colonial contact, Pearson attributes such shifts to endemic warfare between indigenous groups, rather than interactions between indigenous communities and European colonialists.

Shifts in the demographic character of a region in a given period can often be detected in the changing patterns of settlement across a landscape. In most cases, changes in the number, size, integration, and ecological setting of sites can yield important demographic information (Ammerman 1981; Kolb 1985). Clear chronological and cultural differences between ceramic assemblages have been instrumental in untangling the changing demographic patterns in the Upper Tigris River region during the Neo-Assyrian Imperial period (ca. 900–600 B.C.). By juxtaposing the low-fired, handmade corrugated ceramics indicative of the pre-Assyrian settlements in much of southeastern Turkey, with the distinctive mass-produced Assyrian ceramics (Parker 2003:Figures 6, 9 and 10), and by closely examining the morphology and ecological contexts of sites where these ceramics occur, I have attempted to discern demographic patterns along parts of the Upper Tigris River (Parker 2001, 2003). These data support the conclusion that during the Early Iron Age (ca. 1100–900 B.C.), the era immediately prior to Assyrian annexation of parts of its Anatolian frontier, the Upper Tigris River valley was home to 19 villages that were not part of a complex regional polity. Excavations at the site of Kenan Tepe suggest that this, and probably other key sites in the valley, was abandoned or destroyed prior to or during Assyria's conquest of the region (Parker 2003). Of the 19 Early Iron Age sites identified, only 9 continued to be occupied during the Imperial Period. Thus there is clear evidence for either an outward migration and/or violent attrition of the

local inhabitants of the valley in the wake of Assyrian annexation of the region.

The settlement data also indicate that there was a large inward migration during the Assyrian Imperial Period when 20 new sites were established (Parker 2003). I have argued elsewhere that much of this inward migration is at least partly the result of Assyrian resettlement policies that saw large numbers of people deported from their homelands and resettled, often in volatile frontier regions (Parker 2001; Parker and Creekmore 2002; also see Oded 1979). Whether or not this inward migration was due to Assyrian resettlement policies, it certainly changed the demographic makeup of the Upper Tigris River region in a dramatic and archaeologically recognizable way. Parallels for forced population movements into, or out of, borderlands can be found in various parts of the ancient world including Inca Peru (La Lone and La Lone 1987; Murra 1980), Shang China (Trigger 2003:112, 398), and Vijayanagara India (Stein 1989).

Culture mutation and/or the creation of new ethnic groups in boundary zones have attracted considerable attention in recent years. Richard White's (1991) theory of "the Middle Ground" demonstrated that frontiers between previously distinct peoples can often act as interaction regions that, under the right circumstances, can produce a hybrid area or "middle ground" where previously distinct cultures blend into new forms (Hannerz 1996). Using archaeological data, van Dommelen documented a similar situation in Sardinia, arguing that colonial situations can cause a hybridization effect in which cultural traits of various peoples (in his case, the Carthaginian and indigenous Sardinian peoples) are mixed to produce a creole, or hybrid, culture (van Dommelen 1997, 1998; also see Kopytoff 1999; Lightfoot and Martinez 1995; Wendl and Rösler 1999).

Although borderland situations may result in hybridization, this is not always the case. Barth (1969, 1994) and others (Hodder 1982; Vermeulen and Groves 1994) have shown that, instead of breaking down boundaries, interaction between ethnically distinct populations can solidify or reinforce ethnic differences as the groups involved strive to maintain identities in a context of cultural exchange and economic interdependence. It should also be noted that, in his study of Roman provinces in what is today southern Germany, Peter Wells has

argued that Roman presence and the proliferation of Roman goods that followed had a limited impact on the identities of local inhabitants (Wells 1998), while Kopytoff has shown that in traditional Africa, shifting demographic boundaries encouraged cultural continuity or “reproduction” rather than change and hybridization (Kopytoff 1987b:7–8).

Rodseth (2005), and to some extent Rice and Rice (2005), take the concept of the creation of new cultural formations in frontiers a step further, demonstrating that frontiers can be the scene of ethnogenesis. Rodseth enumerates two ways in which ethnogenesis can occur: merger or fragmentation. The first is clearly a trend in many boundary situations and is in a sense an extreme result of the process of hybridization (see also Hill 1996; Roosens 1989). However, Rodseth points out an important exception to this rule. His study of the Himalayas shows first that borderlands can be spaces that *limit* rather than promote intercultural contact. And second, a geographic situation that limits or curtails interregional contact can also result in ethnogenesis as previously united groups fragment and take on new identities.

Cultural Boundaries

This category is meant to encompass linguistic, religious, and material culture boundaries and therefore includes, both in and around borderlands, the number, location, and relationship of languages spoken, the religious beliefs and practices populations, and the type and distribution of material culture.

Linguistic boundaries are particularly important because language is a key ingredient defining group identity (Barth 1969; Schubert 1999). Although notoriously difficult to delineate, when linguistic geography can be worked out it has often added considerable depth to the characterization of borderlands. Ran Zadok, for example, has uncovered a very detailed picture of the ethnolinguistic character of large parts of Mesopotamia through the analysis of onomastic evidence (Zadok 1989, 1995, 2002). References to interpreters in Neo-Assyrian letters attest to the difficulties that colonial officials had in dealing with the vast number of native languages and cultures they encountered in the process of colonization (a similar situation to that encountered by colonial authorities in North America 3,000 years later). These texts contain a

number of references to translators and in some cases even include quotes from otherwise undocumented languages (Parker 2001:386–387; Lanfranchi and Parpola 1990:35).

Religious beliefs and practices are perhaps the most difficult category of data to evaluate in the archaeological record. The location of shrines, temples, and pilgrimage sites may play an important role in frontier dynamics (Bauer and Stanish 2001). In some instances a core or colonial power may promote a state religion, in which case religious boundaries may be pushed into or through a borderland (Farnsworth 1989), while in other cases religious leaders not officially connected to, or even in opposition with, a core authority may have a significant and lasting impact on local belief systems (Eaton 1993). It has long been recognized that acculturation is usually a two-way process (see especially Cusick 1998); however, religious conversion may cause social change that is much more unilinear, thus acting in opposition to the hybridization effect described above. Often the promotion of an established religious system not only acted as a means of justifying asymmetrical relationships between the inhabitants of a core polity and those of an adjacent borderland (Liverani 1979), but supplied the agents that brought about religious, and social, change. Several authors have emphasized the important role that missionaries played in the colonization of various borderlands (Axtell 1981; Elphick 1981; Farnsworth 1989, for example). Although the goal of missionaries was the conversion of native populations, Axtell argues that religious conversion was “tantamount to a complete transformation of cultural identity” (Axtell 1981:238). Eaton has shown that Sufi mystics in medieval Bengal did much more than establish mosques in rural areas. They mobilized frontier communities, organizing forest clearing and agricultural development. These “Muslim pioneers” were thus instrumental in the shifting religious *and* economic frontiers in the Bengal delta (Eaton 1993, 2005).

Material culture boundaries can often be determined by plotting the distribution of, for example, ceramic type fossils or assemblages, portable objects, architecture and burial types (see, for example, Parker 1997b). Although there are obviously many methods by which these and other categories of material culture become distributed across an

archaeological landscape, comparing material culture boundaries to other boundary categories and subcategories can help to illuminate the processes responsible for material culture dispersal. Barth and other anthropologists interested in ethnicity and the creation of group identity have argued that interaction between distinct groups tends to create or reinforce social boundaries, some of which may be expressed in the archaeological record through the distribution of material remains (Barth 1969, 1994; Cohen 1985, 1994; Stark 1998). Other categories of material culture may be dispersed through economic networks. By plotting the distribution of various categories of material culture, several scholars have shown how the creation and maintenance of the Roman frontier dramatically affected regional trade patterns within and across political and administrative boundaries (e.g., Elton 1996b:77–96; Whittaker 1994:113–131; Woolf 1992). This example serves as an excellent transition in to the next subsection since it ultimately involves economics. More importantly, however, the examples cited in this section illustrate the interconnectedness of these and other boundary subsets.

Economic Boundaries

This category includes but is not limited to the extraction and export of natural resources in borderlands, the production of finished products in borderlands, the import of raw materials and manufactured goods into borderlands, and the transshipment of raw materials and manufactured goods across borderlands (Paynter 1985). In the subsection on geography, I already mentioned the importance that natural resources played in the makeup of several case studies (i.e., North America and South Africa), and I am certain that many more such case studies could be cited. However, under the category of economic boundaries I would emphasize the modes and intensity of the exploitation of those materials, the means by which such materials are converted into finished products, and the effects that shifting economic boundaries may have on frontier societies and ecosystems. Finally, the remains of imports in a borderland may illuminate economic networks that linked remote frontier regions with larger interaction networks (Woolf 1992).

In cases where core polities project their power into or through a borderland for the purpose of

acquiring natural resources, the method and intensity of resource extraction can have a lasting impact on both the natural and the human environment. The American fur trade offers an example of economic exploitation that both attracted immigrants and degraded the environment. As overexploitation ravaged animal populations, trappers, and their aboriginal trading partners, increased the intensity of that exploitation in formerly productive areas, and in doing so caused irreparable damage to local ecosystems (Richter 2001; Wishart 1977). Overexploitation and diminishing returns also promoted deeper and more intrusive penetration into the American interior (Hinderaker 1997; White 1991; Wishart 1977). Another example can be found during the Mesopotamian Iron Age when the textual record indicates that one of the major concerns of the Assyrian provincial administration was the procurement of timber (see below and Parker 2001: 227–229). These sources also show that overexploitation of forest resources led to the deforestation of large portions of several Assyrian provinces (see above under “Geographic Boundaries”).

Often colonists are brought or migrate into such areas for the express purpose of resource extraction. Such colonization, whether long or short term, can have a dramatic effect on the archaeological record by altering and/or reorienting settlement systems and producing many contemporary sites with a similar, usually intrusive, material culture (Parker 2003). Mining in the western United States, Africa, and elsewhere offers interesting examples of how such forces contribute to the dispersal of sites into very remote locations (Godoy 1985).

Since the transportation of large quantities of ore is usually impractical, mineral resources often go through initial processing at or near their source. Yener has not only shown that in Anatolia initial ore processing was done very close to ore sources, but that secondary processing, refining, and smelting was also often undertaken in source areas where fuel was more readily available (Yerner 2000). Another example can be found in third millennium Iran where the inhabitants of Tepe Yahya carved local chlorite in a so-called “international style” for transport and distribution in southern Iraq (Lamberg-Karlovsky 1973).

In cases where core polities establish colonies in a frontier region, indigenous populations may take advantage of new markets created by the pres-

ence of large numbers of itinerant or newly settled people. Several scholars have shown how the presence of Roman legions in frontier regions had a profound reorienting effect on local economies (Elton 1996b; Fulford 1992). My own research at several sites in the Upper Tigris River valley of southeastern Turkey suggests that Assyrian colonization there caused a dramatic shift in local subsistence patterns. Excavations at Kenan Tepe suggest that the Early Iron Age inhabitants of the valley practiced a mixed agro-pastoral economy. Sheep and goat were raised largely for secondary products such as wool and milk, while cereals were cultivated in the surrounding fields. The diet was probably supplemented by a variety of wild species (Parker 2003; Parker et al. 2003). Excavations at the site of Boztepe show that this pattern shifted during the Assyrian Imperial Period when the village economy appears to have become more specialized, probably focusing on agricultural production rather than animal husbandry. Pig becomes the most common domesticate and the relative proportion of sheep declines sharply (Parker and Creekmore 2002). Since the textual record indicates that the imperial authorities maintained large state-owned flocks, the lack of faunal remains of sheep and goat at sites like Boztepe may be a result of the empire's control over certain aspects of the regional economy (Parker 2003).

Although there is very little data with which to evaluate pre- and postconquest metallurgy in the Upper Tigris River region, some generalizations can be proposed. Excavations at the site of Gre Dimse show that the Early Iron Age inhabitants were capable of producing high-quality iron (Karg 2001). However, if the production facilities unearthed at Kenan Tepe during the same period are any indication, the metal production was small-scale and locally administered (Parker et al. 2003). In contrast, metal artifacts discovered at Ziyaret Tepe, the Assyrian administrative center in the valley, are not only made of various materials, including silver and bronze (Matney et al. 2003), but are luxury goods probably produced for an imperial elite. The size and location of the metallurgical facilities at Ziyaret Tepe further suggest that during the Assyrian imperial period the production of such goods was both large-scale and centrally administered (Parker 2003).

Several studies of modern borderlands highlight

the ways in which borderland communities exploit, with varying degree of success, the transshipment of goods across borders (Alvarez and Collier 1994; Driessen 1999; Flynn 1997; Nugent 1999). Flynn's study of the border between Benin and Nigeria exemplifies how frontiers can offer lucrative opportunities to local inhabitants, especially in cases where such areas lack centralized governmental authority. Such cross-frontier networking often precipitates intraregional ties between borderland inhabitants (Pacheco 2004). An interesting parallel can be drawn between this modern borderland and the northern and northeastern frontiers of the Assyrian empire at the end of the eighth century B.C. Several letters from the correspondence of the Assyrian king Sargon II (721–705 B.C.) concern persons involved in cross-frontier commerce, or, what is in the eyes of Assyrian officials, smuggling (Lanfrachi and Parpola 1990:79–80; Parpola 1987:46). Like their modern counterparts, these smugglers take advantage of resource disparities and exchange rates. In a letter addressed to the Assyrian monarch, an official in the Assyrian vassal state of Kumme reports on a smuggling ring that transports luxury goods purchased in the Assyrian heartland across the frontier into the highlands of Anatolia where they sell them in the rival empire of Urartu (Lanfrachi and Parpola 1990:79–80). The official recommends that the king write to the mayor of a friendly border town and request that he arrest and extradite the individuals involved so that they can be interrogated and punished. Like the modern example, the Assyrians seek to establish governmental authority in frontier regions and thus regulate illicit cross-frontier commerce, not only to control the types of goods traded, but also to divert revenue to government coffers (Flynn 1997:316–317).

Isolating and Analyzing Boundary Processes

The Continuum of Boundary Dynamics (Figure 2) is meant to help researchers *characterize* specific boundary situations and will hopefully allow various types of boundaries to be more easily compared. Thus I feel this model is a big step toward reaching the second goal set out in this paper: it provides a platform for the interdisciplinary and/or interregional discussion of various types of boundaries. Unfortunately, the continuum does not gauge

the *processes* taking place around or within borderlands. However, the above discussion, which highlights some of the intricacies of each category of data measured on the continuum, will, I believe, aid us in analyzing these processes.

It is my position that boundary processes can best be understood as the dynamic interaction that takes place between the categories and subcategories of data measured on the continuum. My effort to break down the various types of boundaries that may exist in borderlands shows that there is not only a considerable amount of overlap between these categories of data, but also that their components are inextricably interconnected. For example, the colonization of a region (political) may result in a change in the ethnic (demographic) and linguistic (cultural) makeup of a borderland; the extraction of raw materials (economic) is conditioned by the types and quantity of resources available (geographic); population shifts (demographic) may affect the nature and distribution of material found in a borderland (cultural), and so on. Thus, defining and characterizing the various components that make up boundaries and carefully analyzing these components brings us much closer to understanding the nature of boundary processes. The next step, then, should be to analyze how these various components interact and how such interaction produces variation both through time and within and between specific borderland situations. Considering, for example, how the distribution of resources (geographic) and the method of their exploitation (economic) affects the relationship between indigenous and exogenous peoples (demographic), or how religious and material cultural boundaries (cultural) affect and are affected by the projection of military or political power into a borderland (political) should allow us to consider boundary processes more closely and much more systematically.

To help us visualize the nature of borderland situations I have attempted to represent this dynamic set of interactions in Figure 3. This figure, called the "Borderland Matrix" shows each of the boundary sets that make up borders and frontiers within borderlands. These boundary sets are shown as intertwined strings. We should envision each string (whether geographic, political, cultural, demographic, or economic) as a boundary set that is made up of various smaller strands or subcate-

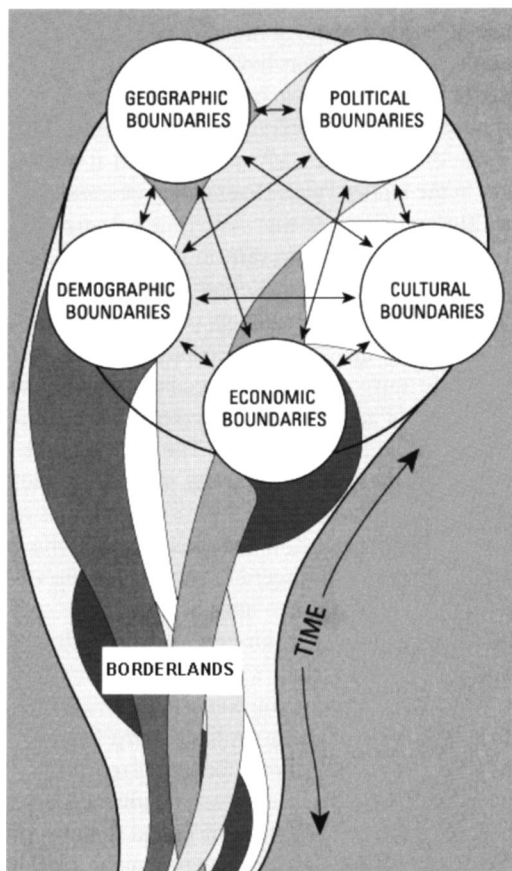


Figure 3. The Borderland Matrix. This figure is a conceptualization of how various types of boundaries (or boundary sets) combine and interact in borderlands. Boundary processes are here envisioned as the dynamic interaction between various types of boundaries both within and between boundary sets through time. The top half of the figure shows the diagram in plan view. The arrows represent the interconnectedness of the boundary sets. As we move through time the relationships between the various types of boundaries represented in the model vary. This interaction—the interaction that takes place within and between boundary sets through time—is the essence of boundary dynamics.

gories. (Thus the "cultural" boundary set is made up of linguistic, religious, and material cultural boundaries, for example.) The dynamics of the interaction between these boundary sets are envisioned as being propelled by time. Thus, as we move from the bottom of Figure 3 toward the top, we move through time. The interaction that takes place between the boundary sets through time is represented by the interwoven strings.

The top half of the figure shows the diagram in plan view. The arrows represent the interconnect-

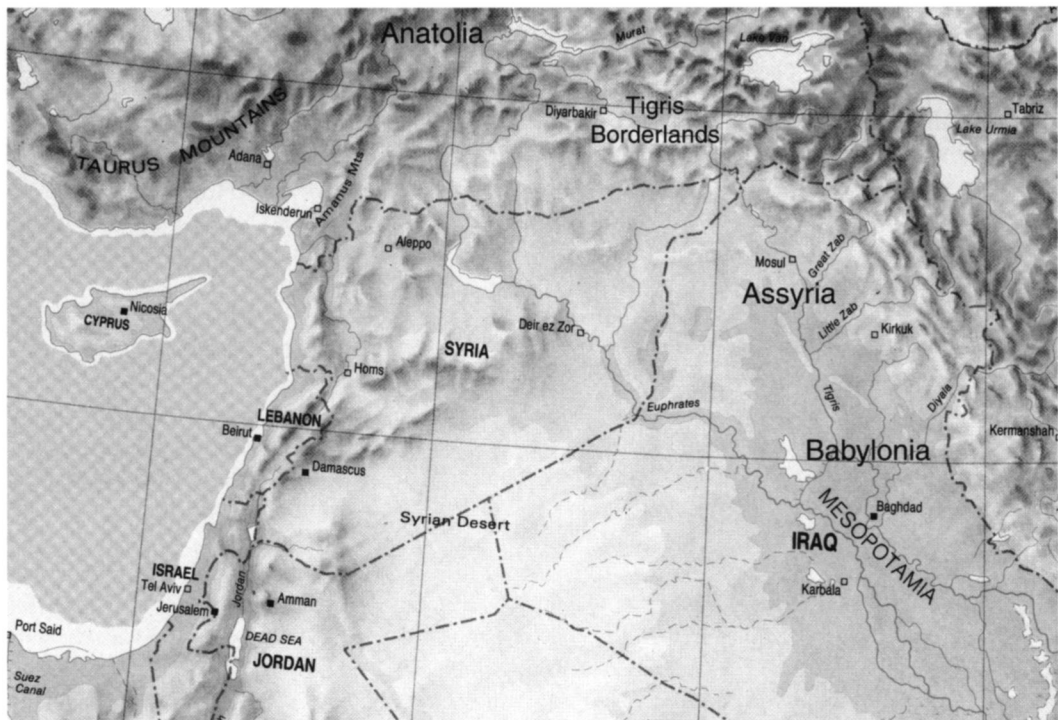


Figure 4. Map of the Middle East showing the location of the area referred to in the texts as the Tigris Borderlands.

edness of the boundary sets. Each of the boundary sets has the potential to influence any other boundary set. As we move through time the relationships between the various types of boundaries represented in the model vary. It is this interaction—the interaction that takes place within and between boundary sets through time—that is, in my opinion, the essence of boundary dynamics.

The nature of borderland processes, envisioned here as the dynamic interaction within and between boundary sets, can be illustrated by briefly examining Assyria's involvement in the Tigris borderlands in southeastern Anatolia over a period of slightly more than two hundred years (from about 911 to 705 B.C.). I must emphasize from the outset, first, that the following case study is not meant to be comprehensive, and second, that this discussion relies heavily on my previous work (especially Parker 2001, 2002, and 2003). The point here is not to repeat previously published data, but instead to throw these data into a new light by analyzing them within the borderland framework presented in this paper. For this reason, I will speak in relatively broad terms and, rather than reiterating every aspect of the data previously discussed, will reference var-

ious publications where these data appear. Through this analysis it should become clear to the reader that even the stories of thoroughly researched borderlands can yield new and interesting insights into borderland processes when viewed through the lens of the models here proposed. It is my hope that, even though the data used to construct this illustration are not new, the following analysis will be helpful in applying these models to other borderland situations and will thus aid researchers in comparing various borderlands through space and time.

The Tigris Borderlands through the Lens of the "Borderland Matrix"

Assyrian imperial policy toward southeastern Anatolia was conditioned by geographic enticements and constraints. To begin with, the heartland of Assyria, in what is today northern Iraq, and Assyria's northern borderland, in what is today the southeastern corner of modern Turkey (Figure 4), contrast sharply in elevation, climate, flora and fauna, topography, and natural resources (Parker 2001:159–160, 2002:377–380). The rugged topography of much of southeastern Anatolia was an obvious impediment to Assyrian imperial ambi-

tions, but at the same time the abundant natural resources of the Anatolian highlands probably underlie Assyria's long-term interest in this region (Maxwell-Hyslop 1974).³ In spite of this, Assyria's economic boundaries were not the first to shift into southeastern Anatolia. Instead, the first boundary to move into this region was Assyria's military boundary.

The first two kings of the Assyrian Imperial period (Adad-narari II [911–891 B.C.] and Tukulti-Ninurta II [890–884 B.C.]) campaigned repeatedly in southeastern Anatolia and in doing so created a military frontier between the lowlands of north Syria and northern Iraq, and the Taurus foothills in southeastern Anatolia (Parker 2001:165–167).⁴ The textual data suggest that, although their campaigns in what I will refer to as the “Tigris borderlands” (Figure 4) were, from a military point of view, quite successful (Grayson 1982:249–253), shifting military boundaries did not, at least at first, guarantee that political and administrative boundaries would follow. Neither Adad-narari II nor Tukulti-Ninurta II were able to consolidate their military gains in southeastern Anatolia as neither of these kings attempted to permanently occupy the areas they conquered there (Parker 2001:165–166).

The nexus of two boundary sets probably contributed to this situation. First, geography dictated that early attempts to permanently occupy and administer this borderland would have been logistically difficult. Since the Upper Tigris River valley is separated from north Syria and northern Iraq by the arid Tur Abdin Mountains, the Assyrians would have had to establish transportation corridors through this rugged terrain to link potential colonies along the Tigris River to the Assyrian heartland. And second, the political boundaries of existing polities in this region may have made its annexation a risky military gamble. Until any significant political units in the region were neutralized, Assyrian colonies in the Upper Tigris would be open to attack. Thus geographic and political boundary sets in southeastern Anatolia probably worked to constrain Assyria's military boundary in its northern borderlands and keep them both from shifting further north and consolidating into a static or restrictive border. Instead, between at least 911 and 884 B.C., this region remained a fluid military frontier.

Despite the theory that Assyria's military boundary in southeastern Anatolia remained fluid for as long as three decades at the end of the tenth and the beginning of the ninth centuries B.C., the projection of Assyrian military force⁵ into this area did have an effect on administrative boundaries there. References to “rebellions” in the Tigris borderlands in the military annals of Tukulti-Ninurta II (Grayson 1991b:171–172) and his son and successor Ashurnasirpal II (Grayson 1991b:200–201), and the fact that Tukulti-Ninurta II installed a pro-Assyrian ruler in the state of Bit Zamani (ancient Diyarbakır [Grayson 1991b:171–172]) suggest that, rather than face a possible military invasion, some polities in the Tigris borderlands entered into tributary relationships with the empire (Grayson 1982:211, 249–251; Parker 2001:166–167).⁶ Whether or not any such agreements were in fact vassal treaties directly administered by Assyrian officials (such as Assyria's vassal treaty with Kumme discussed above) or were instead less-elaborate military alliances, is impossible to say. Nevertheless, any such agreements were the first indication of an attempt on the part of the empire to shift administrative boundaries into the Tigris borderlands.

Political boundaries in the Tigris borderlands changed dramatically with the accession of Ashurnasirpal II in 883 B.C. Knowing the economic potential of the region and faced with a rebellion among Assyria's newly acquired allies there, Ashurnasirpal II embarked on a policy that would lead to the annexation of a large section of the Upper Tigris River valley east of Diyarbakır. In the first five years of his reign, Ashurnasirpal II both consolidated Assyria's military frontier in southeastern Anatolia and pushed Assyria's political and administrative boundaries to the Upper Tigris River.⁷ In doing so, Ashurnasirpal laid the foundation for changes in demographic, cultural, and economic boundaries in the Tigris borderlands.

Ashurnasirpal II began with a full-scale military invasion aimed primarily at key enemy strongholds both in the Tur Abdin Mountains and the area in and around the Upper Tigris River valley.⁸ To solidify Assyria's military boundary on the Tigris River and further establish Assyria's political and administrative boundaries in the surrounding valley, Ashurnasirpal II constructed a series of fortresses along the south bank of the Upper Tigris River

(Parker 2002:380; also see Parker 1997a).⁹ These fortresses were, first and foremost, military and administrative facilities. The provincial government centered at the site of Tushan (Parker 2001:167–175, 2002:381–382) eventually grew into a complex bureaucracy that tightly controlled most aspects of life in the Tigris borderlands. Assyrian provincial administration included, of course, many high-ranking officials. But it also included a large number of lesser bureaucrats such as tax collectors, *corvée* labor officers, and, as mentioned above, village managers (Parker 2002:382–383).¹⁰

In projecting the military boundaries of the empire, creating a military frontier in the Tigris borderlands and then consolidating that boundary on the Tigris River, the Assyrians initiated what would become a drastic shift in the demography of the region. Prior to Assyrian military penetration into the Tigris borderlands, this area had been home to what was probably a number of small politically autonomous polities (Liverani 1992:107; Parker 2003:534). The collapse of the indigenous settlement system, which is clearly evident in the regional survey data (see above and Parker 2003), was almost certainly the result of Assyrian military aggression. With the Tigris basin now protected by Assyrian fortresses, Ashurnasirpal II began the process of colonizing the fertile land along the banks of the Tigris River. Although this process undoubtedly took many generations and probably included both forced and voluntary migration (see above, and Parker and Creekmore 2002), it resulted in a sharp rise in the number of rural settlements in the Upper Tigris River valley. This influx dramatically changed the ethnic and linguistic character of the Tigris borderlands.

The indigenous inhabitants of the Tigris borderlands who may have spoken some variant of Hurrian, Shubrian, or perhaps even Aramaic were either replaced or complemented by settlers and deportees from various parts of the ancient Near East (Oded 1979). In addition, ethnic Assyrians, Babylonians, and other groups arrived in the Tigris borderlands to perform various tasks for the imperial administration or to claim property granted to them, or to institutions with which they were affiliated, by royal decree.¹¹ This inward and outward migration probably created a complicated mix of ethnic and linguistic boundaries both within the areas directly administered by the empire and

between those areas and neighboring polities (Parker 2002:383–385). The complex ethnic and linguistic character engendered by shifting demographic boundaries in the region is exemplified by the references to interpreters, foreign names, and a few foreign words quoted in Assyrian texts noted above. Whether or not these shifting ethnic and linguistic boundaries produced a “Tigris Creole” is impossible to say with the present evidence. One thing is certain, however—through the eighth and seventh centuries, ethnic Assyrians and their language were fast becoming a minority in this and many other parts of the empire (Tadmor 1978, 1991).

Assyria’s colonization of the Upper Tigris River valley brought with it the spread of Assyrian material culture, the most archaeologically visible category of which is ceramics (see above). Assyrian ceramic type fossils, which contrast sharply in shape, ware, and manufacture with the pre-Assyrian and indigenous ceramics of the region, become ubiquitous in the Upper Tigris River valley after the reign of Ashurnasirpal II. Outside the Upper Tigris River valley, many sites retain an indigenous ceramic assemblage. Although some of the variation between these assemblages may be chronological, their distribution suggests that demographic and/or economic boundary sets interacted to produce a material culture boundary in the Tigris borderlands (Parker 1997a).

The solidification of Assyria’s political, military, and administrative boundaries around the Upper Tigris River during the reign of Ashurnasirpal II not only paved the way for shifting ethnic, linguistic, and material culture boundaries, but also opened the area to economic development and exploitation. As mentioned above, one of the factors motivating Assyria’s interest in the Tigris borderlands was clearly economics. The textual data suggest that once Assyrian political boundaries were established in the Tigris borderlands, much of the provincial administration’s efforts were put toward the exploitation of the region’s natural resources and the agricultural development of rural areas around and between Assyrian fortresses.

Assyrian letters dating to the reign of Sargon II (721–705 B.C.)¹² demonstrate Assyria’s interest in acquiring timber from this region. I have noted elsewhere (Parker 2001:227–230, 2002:388–389) that overexploitation of lumber in the Tigris bor-

derlands meant that the Assyrians pushed the economic boundaries of the empire well beyond its political boundaries as logging expeditions were often required to travel far into hostile territory to find suitable timber.¹³ The provincial administration also concentrated on accumulating agricultural surpluses. Much of the colonial population brought into the region by the Assyrians was settled in small villages in the fertile land in the Tigris basin. This policy was undoubtedly an attempt by the provincial administration to bring underutilized land into agricultural production (see above and Parker 1997a, 2001:262–263).

Although the preceding summary of Assyria's intervention in the Tigris borderlands is far from comprehensive, it does create a starting point for the further research into this and other borderland situations. To begin with, this summary illustrates the usefulness of examining the interaction between boundary sets and demonstrates how interconnected these categories of data are. In the case of the Tigris borderlands, this summary shows that geographic boundary sets worked both to aid and obstruct Assyria's intervention in the Tigris borderlands; that Assyrian political boundaries caused indigenous demographic boundary shifts while at the same time created the conditions for exogenous demographic boundary shifts; that Assyria's economic boundaries were in some respects conditioned by Assyria's administrative boundaries, and in other cases worked outside of these boundaries, etc. But perhaps more importantly, this summary demonstrates that the dynamic character of this, and presumably other, borderlands—the very dynamism that make borderlands both intriguing and elusive subjects of study—can be broken into a set of constituent parts. Not only can those parts be examined separately, but the interaction between these parts, what I believe to be the essence of borderland processes, can also be studied.

Conclusion

There is no question the study of the dynamic interactions that take place in borderlands is an important topic of research for many subdisciplines of the Humanities and Social Sciences. However, since the nature of these dynamics can be influenced by a variety of geographic, political, cultural, economic, and demographic factors, it is

important to develop a platform upon which common and unique themes in the study of borderlands can be analyzed. This article attempts to establish such a platform by proposing terminology and theoretical constructs within which to define, characterize, and isolate the components of, and the processes that take place in, borderlands. The first model, presented as Figure 1, assumes that in their most extreme manifestations, borders and frontiers can be envisioned as opposite ends of a continuum that flows from the static closed border on one end to the open fluid frontier on the other. The second model, presented here as Figure 2, elaborates on these ideas by acknowledging that borders and frontiers are in fact composites made up of various types of boundaries that can be fit into five general categories or “boundary sets”: geographic, political, cultural, economic, and demographic. By studying historical circumstances and processes that contribute to each of these categories of data, researchers can characterize the dynamics of the various types of boundaries that occur in borderlands and in doing so come much closer to understanding the nature of a specific borderland situation at a specific point in history. The third model, presented here as Figure 3, allows researchers to envision the forces propelling frontier dynamics. This model assumes that the processes that take place in borderlands are a result of the interaction between the various types of boundary sets that make up borders and frontiers. It also assumes that dynamics of these processes are propelled by time. As geographic, political, demographic, cultural, and economic pressures in any specific borderland change through time, the interaction between these boundary sets creates the dynamics that characterize borderlands. Thus, borderland processes can be defined as the dynamic interaction within and between boundary sets as their characteristics (i.e., static, restrictive, porous, fluid) and the nature of their interconnections vary through time.

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- model that can be used to help isolate and define the nature of boundary processes. The ideas presented here rely on my previous work, especially “At the Edge of Empire: Conceptualizing Assyria’s Anatolian Frontier” (Parker 2002), *The Mechanics of Empire* (Parker 2001) and the introduction to *Untaming the Frontier in Anthropology, Archaeology, and History* (Parker and Rodseth 2005). My intention is not to repeat the arguments made in these publications but rather to build on them. In order to do so it is necessary for me to summarize here some of the points made in these previously published studies.
2. The first definition offered for the term *border* in the *OED* is “A side, edge, brink or margin, a limit, or boundary, the part of anything lying along its boundary or outline.” The second definition is “The district lying along the edge of a country or territory, a frontier.” Among the definitions of *frontier* offered by the *OED* is “the part of a country the fronts or faces another country, the marches, the border or extremity conterminous with another.” *Boundary* is defined as “That which serves to indicate the bounds or limits of anything.” Note also that *limit* is defined as “A boundary, frontier...”
3. The Maden Tetkik ve Arama Enstitüsü Yayınlarından publishes maps and other data from the Turkish Geological Survey. The pertinent volume for the Upper Tigris River region is edited by Erentöz and Ketin (1962). A brief description of the geomorphology of the Upper Tigris River valley can also be found in Kuzucuoglu 2002.
4. The military annals of the Assyrian kings are being published in a series from the University of Toronto called the *Royal Inscriptions of Mesopotamia*. The annals of Adad-narari II (911–891 B.C.), Tukulti-Ninurta II (890–884 B.C.) and Ashurnasirpal II (883–859 B.C.) are published in Grayson 1991b. Unfortunately, comparatively little is known about Adad-narari’s exploits since only three versions of his annals have survived, two of which date to relatively late in his reign. The limitations of our knowledge about the exploits of Adad-narari in Assyria’s northern borderlands are exemplified by a summary inscription contained within an annalistic text of relatively late date (893 B.C.) in which Adad-narari claims to have marched into the Upper Tigris River region (referred to as the “Lands of Nairi”) four times (Grayson 1991b:148–149). Tukulti-Ninurta II, the son of Adad-narari, ruled Assyria for only six years (890–884 B.C.). Although his military exploits are preserved in only one copy of his annals and two summary inscriptions, it is clear that the Tigris borderlands were his primary target since he launched at least three campaigns to that area during his short reign (Grayson 1991b:163–179). Not only is the reign of Ashurnasirpal one of the most important eras in the formation of the Assyrian empire but, Ashurnasirpal’s annals are very well preserved, explicitly written and come down to us in numerous copies. These texts contain a wealth of detail about various aspects of geography and society at the time (see especially Liverani 1992).
5. For a discussion of Assyrian military force and the difference between *power* and *force* see Parker 2001:259–260. Note that many of the ideas presented there are adapted from Luttwak 1976:195–200.
6. Note that the same individual installed in Bit Zamani and forced to take an oath of loyalty by Tukulti-Ninurta II is

Notes

1. This paper is an attempt to construct a theoretical

mentioned again in the annals of Ashurnasirpal when he was murdered by rebels (Grayson 1991b:261, 1982:254; Parker 2001:172).

7. Ashurnasirpal campaigned in the Tigris borderlands during the first and fifth years of his reign (883 and 879 B.C., respectively [Grayson 1982:253–259; Parker 2001:167–173]).

8. The routes taken by Ashurnasirpal are outlined in Liverani 1992 and discussed in Grayson 1982 and Parker 2001.

9. From east to west these fortresses are: Tushan (Ziyaret Tepe), Tidu (Üç Tepe) and Sinabu (Murattas [Kessler 1980:117–120; Liverani 1992:38–40; Parker 1998, 2001:162–164, 188–206, 2002:380–381]).

10. For an overview of the Assyrian bureaucracy, see Grayson 1991a and Postgate 1974. For corvée labor officers, see Parker 1997a:84–85. For village managers, see Parker 2001:225–226. Note that recent excavations at the site of Ziyaret Tepe (Assyrian Tushan) have unearthed what the excavator believes to be the office of a tax collector (Matney et al. 2003).

11. There is a relatively large corpus of grants and royal decrees from the Assyrian Imperial period. Although there are no direct references to property granted in the Tigris borderlands, this practice is well attested and it is therefore logical to assume that some of the territory administered by the

Assyrian's in this region would have been granted to individuals or institutions (Kataja and Whiting 1995).

12. A large number of letters from the Neo-Assyrian corpus, most of which originate from the Assyrian capitals at Nimrud and Nineveh, can be dated to the reign of Sargon. For a review of the chronology and general categories of the Neo-Assyrian letters, see Parpola 1981.

13. Tensions between Assyria and two states beyond the Tigris borderlands (Shubria and Urartu) are exemplified by a series of letters sent from the governor of Tushan to the Assyrian king Sargon II. Among these is a report on the various diplomatic efforts employed in an attempt to persuade the Shubrians to grant the Assyrians the right to cut timber in Shubrian territory (Lanfranchi and Parpola 1990:27–28). However, even during the course of these negotiations, the Assyrian governor sent a logging team escorted by cavalry to continue to cut timber without the permission of the Shubrians. And in another letter, the same author tells the king that he will need an armed escort in order to bring out timber that has been cut but still lies waiting to be transported from a Shubrian forest (Lanfranchi and Parpola 1990:25–26).

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