

Chapter 2

Establishing Frontiers

The frontier in history is a powerful image; the notion of a zone of engagement has captured scholarly imaginations for generations.¹ The idea of the frontier looms particularly large in South African history and historiography, frequently inviting comparisons with the westward movement of settlers in North America and encompassing attendant explorations of conquest and resistance, cross-cultural contact, colonial dialectics, environmental resource allocation, European hegemony, and debates about race and national identity.² The frontier as both geographic place and as method of inquiry continues to have salience—in South Africa and elsewhere—despite a long and contested historiography. Notwithstanding all the ink spilled in efforts to define, demarcate, and deconstruct frontiers, the idea still has intellectual rigor.³ **1**

One reason for the persistence of frontier as an analytical category is its flexibility. The notion of a boundary both fixed and porous, a region simultaneously claimed and fought over, a moment that is both fixable in time and yet open-ended is particularly alluring. The frontier can be poked and prodded and stretched without being convoluted beyond recognition. Its plasticity gives the frontier the ability to bridge temporal, spatial, and theoretical gaps, making it well suited to a variety of critical circumstances, but also in need of careful scrutiny every time it is invoked. **2**

My own understanding of frontier is rooted specifically in South African debates, inflected by Africanist and comparative colonial contributions. The frontier was a hinterland, at the margins of effective governmental control but not completely beyond the Company's reach. I am indebted here to Leonard Guelke's formulation of "outlaw" and "orthodox" frontiers for suggesting a way to go beyond simply "opening" and "closing" fluid "contact zones," thereby progressively bringing more territory into the colonial orbit.⁴ A conception of frontiers as serially opened then closed assumes rather than explains the terms of conquest. The idea of outlaw and orthodox social formations, by contrast, offers a more nuanced understanding of frontiers by probing the ways which individuals and groups interacted among themselves and with colonial authority.⁵ **3**

Building on Guelke's formulation, I assert a conceptualization of the frontier as both a region and period of time in which orthodox and heterodox ideas, practices and social relationships were in tension. Broadening the description of outlaw to the more inclusive term heterodox creates a more capacious intellectual category. Heterodox encompasses a range of resistance from outright lawlessness to the creation of alternative households and the staking of marginal or unofficial claims to land. This heterodox/orthodox formulation lets us think about a space and time in which some people exploited the space beyond dominant **4**

conventions. Others—typically those with access to land and livestock—increasingly saw their lot as invested in conformity with the established colony rather than tied to the opportunities and risks of life beyond it. Thus I am using Guelke's perspective to portray colonial engagements not only in terms of "settler" and "native," but significantly also to characterize frontiers as space where both colonizing and colonized peoples contested metropolitan expectations. Orthodoxy, then, was an affinity with colonial authority.⁶

The explanatory power of the frontier is strong, as Penn and others have noted, but it is not unassailable.⁷ Robert C.-H. Shell, for example, makes an argument that the dynamics of slavery and slave holding, not the frontier, framed the character of subsequent historical developments, particularly race relations.⁸ I walk not a middle ground but a different path to explaining South Africa's past. **5**

The agrarian nature of the colonial enterprise at the Cape—the struggle to coax a living from the land—offers the most appropriate context in which to comprehend early South African history.⁹ Within that context, family structure and household organization are fundamental. Neither the independence of the frontier nor a brutal system of forced labor premised on violence completely encompasses the socioeconomic dynamics at play in the eighteenth century. But where these two strands intersect—on the loan farms of the frontier—we can see clearly the contested efforts to claim land, control territory, and assert preeminence that were made first by colonial settlers and then exerted by the state. **6**

To describe the region surrounding the upper Olifants River Valley as a frontier is more than a geographical marker indicating the outer limits of colonial settlement. From 1725 until about 1750, farms claimed along the Olifants River and in the surrounding Cedarberg did, in fact, represent the furthest reaches of colonial land claims in a northwesterly direction from Cape Town.¹⁰ The Cedarberg, however, remained a frontier long after an advancing perimeter of loan farms had extended to the north and the west.¹¹ As Guelke notes, "The frontier was not a simple geographical phenomenon but a complex region which offered opportunities to many different kinds of people."¹² **7**

Some of those people homesteaded in the Cedarberg for nearly a century before the colonial government established a local administrative presence in Clanwilliam. Consequently, the region was long-lived as a contested zone—but one with a paper trail that shows successive generations of settlers transforming violently-contested land claims into widespread, year-round ranching properties anchored by well-stocked houses and multiply-intersecting family relationships. **8**

Textures of Frontier Life

Social diversity characterized the Cedarberg from the time of the first land claims until well into the nineteenth century. The composition and density of frontier society changed over the course of one hundred years, adding a temporal element to Guelke's depiction while emphasizing the variety he describes. For Khoisan, frontier regions afforded continued, though restricted, access to land—not so much an opportunity as a mitigated misfortune. Among Khoisan who could no longer sustain an independent community, some individuals in frontier regions made limited land claims, some women married or established permanent relationships with settler men, and many found employment in colonial households, though in admittedly subordinate positions. **9**

For settlers, frontier opportunities were both material and social. The prospect of land plus the availability of game and other resources meant the elements of subsistence for some and the chance of enrichment for others. Outlaws and scofflaws lived in community with state-appointed veldkornets. Soldiers and slaves fled to the frontier.¹³ Even European travelers visited the colony's remote outposts and reported on the differences there in comparison to Cape Town and its closer hinterlands at Stellenbosch and Drakenstein.¹⁴ **10**

The frontier offered socioeconomic mobility, porous racial distinctions, and refuge from the law; however, it was not beyond the reach of either legal or social mechanisms of conformity. Frontier residents may have challenged prevailing social norms, the availability of frontier land may have been a safety valve diverting demographic pressure and thus deflecting dramatic social change, but the frontier experience did not fundamentally reshape the contours of society that began forming at the Cape with the arrival of the first VOC garrison in 1652. After all, our knowledge of outlaws and runaways in frontier regions comes from landdrosts' reports and criminal trial proceedings, evidence that distance and a heterogeneous, heterodox population was not refuge enough from the state's justice. Eventually, the norms established in Cape Town prevailed throughout the colony. **11**

This conquest came slowly to the Cedarberg. The century-long process was a daily struggle for countless Khoisan, four generations of settler families, and their slaves. They did not live "on the frontier," but rather at Kridouw Krans, or on the farm Halve Dorschvloer, or at other recognized places in the landscape. They may have moved, some individuals quite often, but their families and communities were connected firmly to the region, networks of watering and resting places supplanted by a network of farms occupying the same places. This book tells the story of how one society both displaced and absorbed another, a particular, specific version of colonial dynamics that unfolded around the world in the eighteenth century. **12**

Specifics of Frontier Scholarship

Characterizing the Cedarberg as a frontier zone evokes direct comparisons with other areas of colonial settlement in seventeenth- and eighteenth-century South Africa. The Cape saw two broad strands of colonial expansion into the interior: easterly and northerly migrations. The eastern frontier moved away from Stellenbosch, over the Hottentots Holland Mountains, and across the Overberg to Swellendam. In 1785 the creation of the Graaff-Reinet district extended the eastern colonial boundary to the Great Fish River.¹⁵ **13**

Figure 2.1. Colonial Settlement in 1798

Cross Reference:
Read about expansion into the Overberg.
([appendix.html#p17](#))

The northern frontier, more arid than the east, historically attracted fewer colonial settlers. The climate supported pastoralism, but not widespread cultivation. Consequently, the settler frontier economy was based on stock farming, in contrast to the lucrative wine and wheat farms of the better-watered regions.¹⁶ Poorer and more sparsely populated, the northern frontier attracted less Anglophone scholarly attention than Swellendam and Graaff-Reinet. P.J. van der Merwe's trilogy in Afrikaans remained the major contribution until Martin Legassick's pathbreaking dissertation renewed historians' interest in the region.¹⁷ Subsequent work by Robert Ross, Fred Morton, Barry Morton, Jean and John Comaroff, and Nancy Jacobs greatly enhances our understandings of nineteenth-century dynamics in regions north of the Orange River.¹⁸ **14**

Most recently, Nigel Penn's work forces a reconsideration of the northern frontier areas below the Orange River and before the nineteenth century.¹⁹ Penn's painstaking archival work opens up a new range of possibilities for historical inquiry in areas from the Cedarberg north to Namaqualand, and east-southeast to the Bokkeveld and Roggeveld. His work focuses much-needed attention on frontier areas not directly affected by Bantu-speaking peoples or by missionaries during the eighteenth and early nineteenth centuries. **15**

A closer examination of the Cedarberg frontier is a case in point. Both in temperament and geography, the Clanwilliam district and Cedarberg region fall within the classification of the northern frontier as pioneered by Penn. The broader conceptualization of the northern frontier as used by authors such as Legassick and the Comaroffs leaves the Cedarberg well behind the front lines of colonial expansion. The northern frontier writ large began moving beyond the Cedarberg to Namaqualand and northeast to Griqualand and Trans-Orangia by **16**

the 1760s and 1770s, long before frontier struggles in the Cedarberg were settled. There, the crucial terms of labor relations and land tenure were not firmly in control of orthodox settlers and the colonial administration until well into the nineteenth century.

Boundaries, Methods, and Sources

This process of asserting orthodoxy was entwined with the creation of colonial identities. Struggles over land and labor produced relationships of dominance, subordination, and resistance, the details of which lie bound in the volumes of the VOC archives, embedded in genealogies, painted on rock walls, and buried in the earth of the Cedarberg. **17**

The Dutch East India Company kept copious records, meaning that the Cape has an abundance of written source materials, unlike most regions of Africa in the eighteenth century. However, the ledgers, accounts, and administrative reports of a merchant company do not record the whole story of colonial interactions. To understand the social implications of land tenure, family structures, and the basis of identity, we need to delve into carefully preserved archival documents, stretching them as far as they can go, a method with significant precedent. **18**

Social history was founded on the practice of prodding documents to reveal stories they were not originally intended to tell.²⁰ Then postmodern criticism exploded the definition of text and readability, which expanded the notion of what constitutes an archive.²¹ By necessity, African history has been at the leading edge of such methodological innovations. Since the 1960s, Africanists working with limited written sources have been reimagining ways of reconstructing and narrating the past.²² **19**

In that tradition, this book interrogates the relationship between narrative history and its constituent source materials. Each chapter in Part III reconstructs a family history from different kinds of written documents. None of these sources stands alone—all of the chapters rely on a wide range of materials for context. But emphasizing different sources in sequence demonstrates a range of possibilities for historical research. **20**

Part II offers a way to rethink connections between archaeology and history.²³ I foreground archaeology because of its fundamental relationship with African history²⁴ and because it provides evidence crucial to understanding changing land use and land tenure in the Cedarberg, detailed in Chapter 3. The traces in the landscape left by brushes dipped in ochre, by beads, and by bits of stone tools also hint at subordinated colonial identities—contested social formations that were lost during a period of extreme transformation, discussed in Chapter 4. **21**

Equally important, this juxtaposition of archaeological and documentary evidence challenges traditional notions of periodization. The colonial and precolonial collided in the Cedarberg. Individuals from vastly different traditions cooperated, collaborated, cohabited, procreated, and married. They fought violently and transmitted virulent diseases. They transferred technology conceptually across millennia and spatially across the subcontinent. In these interactions, the historic and the prehistoric cohabit, populating the same narrative and destabilizing categories of knowledge. In a world where historic and prehistoric bleed into each other, it is possible to adjust our vision of the past and to project this refracted periodization back across the Atlantic. Imagine a "precolonial Europe": France before sugar, England before tobacco, Spain before a tremendous influx of silver. **22**

The term precolonial, applied to regions that would become colonies of European states, implicitly suggests a time or a place of waiting, peoples somehow living in anticipation of their subordination to an external power. This description resonates with Dipesh Chakrabarty's characterization of postcolonial states existing in a condition of a global "not yet."²⁵ Could we not equally envision Europeans waiting for commodities, luxuries, and the mass availability of cheap labor to fuel unprecedented economic change?²⁶ Admittedly, "precolonial" imperfectly describes Europe, but it is equally uncomfortable for Africa. Global inequalities of power—then and now—are embedded in the terminology we use to discuss the past. We are unlikely to discard the category of precolonial, but we should at least be aware that a wide range of attributes rooted in, or relegated to, a murky, unwritten past did, in fact, persist well into the time of colonization, as both documentary and archaeological evidence from the Cedarberg attests.²⁷ **23**

Notes

Note 1: Particularly interesting reconceptualizations of frontiers in historical analysis include James F. Brooks, *Captives and Cousins: Slavery, Kinship, and Community in the Southwest Borderlands* (Chapel Hill: The University of North Carolina Press, 2001); Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650–1815* (Cambridge: Cambridge University Press, 1991); Peter Sahlins, *Boundaries: The Making of France and Spain in the Pyrenees* (Berkeley: University of California Press, 1989); and Igor Kopytoff, ed., *The African Frontier: The Reproduction of Traditional African Societies* (Bloomington: Indiana University Press, 1987).

Note 2: For an elegant historiography of the frontier in South African history, see Nigel Penn, *The Forgotten Frontier: Colonist and Khoisan on the Cape's Northern Frontier in the Eighteenth Century* (Cape Town: Double Storey Books and Athens: Ohio University Press, 2005), 9–13. On comparisons between North America and South Africa, see Howard Lamar and Leonard Thompson, eds. *The Frontier in History: North American and South Africa Compared* (New Haven: Yale University Press, 1981).

Note 3: Susan Newton-King's *Masters and Servants on the Eastern Cape Frontier, 1760–1803*. (Cambridge: Cambridge University Press, 1999) and Penn's *The Forgotten Frontier* are both excellent recent narrative accounts of frontier tensions, and testament to the continued salience of frontier studies in South African history.

Note 4: Leonard Guelke, "The Making of Two Frontier Communities: Cape Colony in the Eighteenth Century." *Historical Reflections/Reflexions Historiques* 12:3 (1985), 419–48. The idea of open and closed frontiers is Giliomee's, articulated in "Processes in Development of the Southern African Frontier," in Lamar and Thompson, 76–119. "Contact zone" comes from Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation*, (London: Routledge, 1992).

Note 5: Guelke's theoretical contribution has been underrepresented in South African frontier historiography.

Note 6: My use of the term "orthodox" is not the same as Bourdieu's, embedded in *habitus*—the social reproduction of structures in a stable society. Pierre Bourdieu, "Structures, Habitus, Power: Basis for a Theory of Symbolic Power," in *Culture/Power/History*, N. B. Dirks, G. Eley and S. B. Ortner, eds., 155–99 (Princeton, NJ: Princeton University Press, 1983). In following Guelke's use of the term in a frontier context, I instead use "orthodox" to describe the visible markers linking individuals and communities with the settler identity that dominated colonial society. This orthodoxy in a frontier zone represented a choice to identify with the dominant culture—thereby extending its dominance.

Note 7: Martin Legassick, "The Frontier Tradition in South African Historiography," in Shula Marks and Anthony Atmore, eds., *Society and Economy in Pre-Industrial South Africa* (London: Longman, 1980), 45–47; Saunders, *The Making of the South African Past*, 70–71; Ken Smith, *The Changing Past: Trends in South African Historical Writing* (Johannesburg: Southern Book Publishers, 1988), 96.

Note 8: Robert C.-H. Shell, *Children of Bondage*, xxxi.

Note 9: My thinking on agrarian societies stems from Ester Boserup, *The Conditions of Agricultural Growth: The Economics of Agrarian Change Under Population Pressure* (New York: Aldine Publishing Company, 1965). The importance of agrarian history is by no means overlooked in South African historiography. Notable examples include Marks and Atmore's collection, *Economy and Society in Pre-Industrial South Africa*; William Beinart, Colin Bundy and Stanley Trapido, eds., *Putting a Plough to the Ground: Accumulation and Dispossession in Rural South Africa, 1850–1930* (Johannesburg: Ravan Press, 1986); and Charles van Onselen, *The Seed is Mine: The Life of Kas*

Maine, a South African Sharecropper, 1894–1985 (New York: Hill and Wang, 1996). For work confined to the Western Cape, see Wayne Dooling, "Agrarian Transformation in the Western Districts of the Cape Colony, 1838–c.1900" (PhD diss., Cambridge University, 1996); Mary Rayner, "Wine and Slaves: The Failure of an Export Economy and the Ending of Slavery in the Cape Colony, South Africa, 1806–1834" (PhD diss., Duke University, 1986); and Robert Ross, "The First Two Centuries of Colonial Agriculture in the Cape Colony: A Historiographical Review," *Social Dynamics* 9:1 (June 1983), 30–49.

Note 10: Bergh and Visagie, *The Eastern Cape Frontier Zone, 1660–1980: A Cartographic Guide for Historical Research* (Durban: Butterworths, 1985), 4.

Note 11: Among the earliest record of farms north of the Olifants River Valley include CA: RLR 16:107, 8 Jan. 1761, permit for Willem Koopman on the farm Klip Rugh, described as "over de Olifants en Doorn riviers in die Hantam."

Note 12: Leonard Guelke, "The Making of Two Frontier Communities," 446.

Note 13: Penn, in *Rogues, Rebels and Runaways*, 73.

Note 14: O.F. Mentzel, *A Geographical and Topographical Description of the Cape of Good Hope (1787)*, trans. G. V. Marais and J. Hoge, ed. H. J. Mandelbrote (Cape Town: Van Riebeeck Society, 1925); Anders Sparrman, *A Voyage to the Cape of Good Hope Towards the Antarctic Polar Circle Round the World and to the Country of the Hottentots and the Caffres from the Year 1772–1776*, trans J. & I. Rudner, ed. V. S. Forbes (Cape Town: Van Riebeeck Society, 1975); Carl Peter Thunberg, *Travels at the Cape of Good Hope 1772–1775*. ed V. S. Forbes (Cape Town: Van Riebeeck Society, 1986).

Note 15: J.S. Bergh and J.C. Visagie beautifully illustrate the expanding eastern frontier in *The Eastern Cape Frontier Zone*. A good early study of easterly colonial migration is Edmund H. Burrows, *Overberg Outspan: A Chronicle of People and Places in the Southwestern Districts of the Cape* (Cape Town: Maskew Miller Limited, 1952; reprint, Swellendam: Swellendam Trust, 1988). For a more contemporary reassessment of the eastern frontier, see Clifton Crais, *The Making of the Colonial Order: White Supremacy and Black Resistance in the Eastern Cape, 1770–1865* (Johannesburg: Witwatersrand University Press, 1992). Susan Newton-King's outstanding *Masters and Servants on the Cape Eastern Frontier* is set in the eighteenth century and focuses on the tensions between Khoisan and colonists. Thus it is both a model and a foil for my exploration of colonial labor relations in the Cedarberg.

Note 16: P.J. van der Merwe, *The Migrant Farmer in the History of the Cape Colony, 1658–1842*, trans. Roger B. Beck (Athens: Ohio University Press, 1995); Leonard Guelke, "Freehold Farmers and Frontier Settlers, 1657–1780," in *The Shaping of South African Society, 1652–1840*, eds. Richard Elphick and Hermann Giliomee, 66–108. 2nd ed. (Johannesburg: Maskew Miller Longman, 1989).

Note 17: P.J. van der Merwe, *Die Noordwaarste Beweging van die Boere voor die Groot Trek (1770–1842)* (The Hague: W.P. van Stockum & Zoon, 1937; reprint, Pretoria: Die Staatsbiblioteek, 1988); *Die Trekboer in die Geskiedenis van die Kaapkolonie, 1657–1842* (Cape Town: Nasionale Pers Beperk, 1938); *Trek: Studies oor die Mobiliteit van die Pioniersbevolking aan die Kaap* (Cape Town: Nasionale Pers Beperk, 1945). Roger B. Beck's meticulous English translation of *Die Trekboer* appeared in 1995 as *The Migrant Farmer in the History of the Cape Colony, 1658–1842* (Athens: Ohio University Press).

Martin Legassick, "The Griqua, the Sotho-Tswana and the Missionaries." A shorter formulation of his principal arguments appears as "The Northern Frontier to 1840: The Rise and Decline of the Griqua People," in Elphick and Giliomee, *Shaping*, 358–420.

Note 18: Robert Ross, *Adam Kok's Griquas: A Study in the Development of Stratification in South Africa* (Cambridge: Cambridge University Press, 1976); Fred Morton and Elizabeth Eldredge, editors, *Slavery in South Africa: Captive Labor on the Dutch Frontier* (Boulder: Westview Press, 1994); Barry Morton, "Servitude, Slave Trading and Slavery in the Kalahari," in Morton and Eldredge, 215–50. John and Jean Comaroff, *Of Revelation and Revolution: Christianity, Colonialism and Consciousness in South Africa*, Vol. 1 (Chicago: University of Chicago Press, 1991) and *Of Revelation and Revolution: The Dialectics of Modernity on a South African Frontier*, Vol. 2 (Chicago: University of Chicago Press, 1997) Nancy Jacobs, "The Flowing Eye: Water Management in the Upper Kuruman Valley, South Africa, c. 1800–1962," *Journal of African History* 37:2 (1996), 237–260. Julian Cobbing's seminal contribution sparked an ongoing reconsideration of frontier dynamics that include areas of the northern frontier "The Mfecane as Alibi: Thoughts on Dithakong and Mbolompo," *JAH* 29 (1988), 487–519. Also see Carolyn Hamilton, ed., *Mfecane Aftermath: Reconstructive Debates in Southern African History* (Johannesburg: Witwatersrand University Press, 1995).

Note 19: Nigel Penn, *The Forgotten Frontier*. My own research owes a great debt to Penn's dissertation, which demonstrates the breadth and richness of material available in the Cape Archives for understudied regions of the northern frontier: "The Northern Cape Frontier Zone, 1700–c.1815" (PhD diss., University of Cape Town, 1995). Penn and Newton-King both adeptly demonstrate the possibilities of reconstructing histories of Khoisan and Khoisan – settler relationships from documents not always intended to reveal the complexities of frontier encounters.

Note 20: Natalie Zemon Davis, *Fiction in the Archives: Pardon Tales and Their Tellers in Sixteenth-Century France* (Stanford: Stanford University Press, 1987); Ranajit Guha, ed., *A Subaltern Studies Reader 1986–1995* (Minneapolis: University of Minnesota Press, 1997).

Note 21: Carolyn Hamilton, et al, *Refiguring the Archive* (Cape Town: David Phillip, 2002); Antoinette Burton, ed. *Archive Stories: Facts, Fictions and the Writing of History* (Durham: Duke University Press, 2005).

Note 22: John Edward Philips, ed. *Writing African History* (Rochester: University of Rochester Press, 2005). For a discussion of how Africanist scholarship changed historical method, see Steven Feierman, "African Histories and the Dissolution of World Histories," in Robert H. Bates, V.Y. Mudimbe, and Jean O'Barr, eds., *Africa and the Disciplines: The Contributions of Research in Africa to the Social Sciences and Humanities* (Chicago: University of Chicago Press, 1993), 167–212; Heidi Gengenbach, *Where Women Make History: Gendered Tellings of Community and Change in Magude, Mozambique* (New York: Columbia University Press, 2005), <http://www.gutenberg-e.org/geh01/guide.html>.

Note 23: My approach is detailed in Laura J. Mitchell, "Material Culture and Cadastral Data: Documenting the Cedarberg Frontier, South Africa 1725–1795" in *Sources and Methods in African History: Spoken, Written, Unearthed*, Toyin Falola and Christian Jennings, eds. (Rochester: University of Rochester Press, 2003), 16–32.

Note 24: Kairn Klieman, *"The Pygmies Were Our Compass": Bantu and Batwa in the History of West Central Africa, Early Times to c. 1900 C.E.* (Portsmouth, NH: Heinemann, 2003); Flordeliz T. Bugarin, "Trade and Interaction on the Eastern Cape Frontier: An Historical Archaeological Study of the Xhosa and the British during the Early 19th Century," (PhD diss., University of Florida 2002).

Note 25: Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Chicago: University of Chicago Press, 2000), 7–9.

Note 26: For a discussion of social and cultural changes in Europe after Britain's contact with the Americas, see William Brandon, *New Worlds For Old: Reports From the New World and Their Effect on the Development Of Social Thought in Europe, 1500–1800* (Athens: Ohio University Press, 1986). On Europe's economic transformation as a result of colonial territories, see Kenneth L. Pomeranz, *The Great Divergence* (Princeton: Princeton University Press, 2000).

Note 27: For a clear articulation of "precolonial" persistence into later periods, see Gareth Austin, "'Developmental' Divergences and Continuities Between Colonial and Pre-Colonial Regimes: The Case of Asante, Ghana, 1701–1957," paper presented at the African Studies Association Annual Meeting, New Orleans, LA, 11–14 Nov., 2004.