Conclusion. The Andes-Amazonia divide: Myth and reality

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For most of the past five hundred years, if not longer, the human societies of the Andes and Amazonia have been regarded as displaying fundamental differences. Whether in their subsistence practices, population densities, degree of urbanization, broader social organization or the languages they spoke, the distinct character of the peoples of the two regions has been taken almost as a given. This cultural divide was naturalized as an inevitable outcome of the clear geographical and environmental contrasts between Andes and Amazonia, between temperate highlands and tropical lowlands, walled off from each other by the steep, humid and often impassable slopes of the eastern piedmont. The course of human history and the development of societies on either side of the piedmont, then, were at heart considered to have been determined by environment, and so to have remained essentially immutable over time. But recent revisionism, based on new findings and interpretations of the archaeology of Amazonia, in line with insights from anthropology, have critically revisited these long-standing, engrained assumptions. Indeed, new thinking has sought comprehensively to debunk the notion that there was much real substance to the Andes-Amazonia divide at all. Rather, that divide might be considered little more than a myth: a purely cultural construct, arising from colonial or post-colonial prejudices and preconceptions. It was this debate that stimulated us to convene a conference held in Leipzig in 2014, and subsequently to edit this volume.

We emphasized in our Introduction how, from an editorial standpoint, this book was not driven by theory. It set out from no fundamental presumption as to the nature or indeed the existence of any putative Andes—Amazonia divide. We also pointed out that, simplifying grossly, there may be a general tendency among Amazonianists to take a stance towards this question that is closer to anthropology, more concerned with connections, networks, and so on, and so more inherently 'anti-divide'. Andeanists, meanwhile, may have typically seen things more in terms of complex societies, power relations and so forth, and tend to be more 'pro-divide'. There are many exceptions to this rule, of course. But it will not have escaped the notice of attentive readers that all three editors of this book are Andeanists.

Nevertheless, neither in our invitations to participants in the Leipzig conference, nor in editing and assembling the book itself, did we favour any particular view over any other. Rather, we were interested primarily in the dedicated application of interdisciplinary study to what seemed to us among the most important topics in South American prehistory – and one with clear relevance to the intractable and controversial topic of environmental determinism, which applies everywhere, but perhaps nowhere more starkly than here (as we set out in our Introduction to this volume).

We have thus found surprising the degree to which so many of our diverse contributions continue to favour the reality of an Andes–Amazonia divide in later prehistory after all. This divide is manifest in two ways: in different characteristics (physiological or cultural) of the populations of the Andes or of Amazonia, and in the far lower degree of interaction between these two populations than is apparent internally to either. If the 'divide' is indeed a myth, then it is one that turns out still to hold a strange power over scholars working across numerous disciplines.

Yet, as many chapters in the book make clear, the differences between the human societies of the Andes and of Amazonia did not date from time immemorial. That is to say, the Andes-Amazonia divide did not derive from first human settlement, but arose in more recent times. The chapters collected in Part 2 are devoted to 'Deep Time', generally meaning the first half of the Holocene, while several contributors to other sections also make reference to this early period. Two points are apparent. Firstly, this is the least-known period of all, simply because the evidence available to any of the disciplines is poor. This is the inevitable product of greater time-depth: archaeological sites and source materials are more elusive, and the research dedicated to them also sometimes scantier (see Chapters 1.1, 2.1, 2.4 and 4.4). Secondly, however, in so far as the available evidence can shed light on our key concerns here, it gives little indication of any significant differentiation between Andes and Amazonia. Such contacts and influences as can be detected at these earliest times by archaeology, for example, went in multiple directions (Chapters 1.1, 2.1 and 3.7) and ranged across coast, highlands and eastern lowlands apparently indiscriminately (Chapter 2.4). Certainly, no predominant influence from Amazonia to Andes or vice versa is discernible in the archaeology of these times. Linguistics can add very little signal for this deepest timeframe (Chapter 2.3), although much later, when the earliest meaningful linguistic relations can be determined between the two regions, they too seem to present a 'balanced interaction' (Chapter 4.1). Only in genetics and cranial morphology is some differentiation apparent that might go back to founder populations and first settlement, though even here, majority opinion favours differentiation through later processes, again post-dating the Middle Holocene (Chapters 2.2, 3.2 and 3.3). On the other hand, one of the few chapters presenting primary (archaeological) data at these great time depths - Chapter 4.4 on early Holocene shell middens in the Llanos de Moxos – points to an independent process of cultural development in Amazonia for this earliest period.

From the Middle Holocene onwards, however, the picture changes, to develop in a clear and essentially novel direction. From this time, a divide does indeed become detectable to many of our specialists across the full range of disciplines. and a divide that then grew in substance and resolution into later prehistory, until it was unambiguous by the final centuries prior to the European invasions. Some of the most striking evidence for this divide is archaeological, and dates to the final millennium before European contact. We have seen that Wilkinson (Chapter 3.1), working on the piedmont region itself, argues for a divide between Andes and Amazonia that was not only increasingly pronounced over time, but constituted a 'stark reality' by Inca times. Wilkinson also appears to make among the strongest defences of the ecological foundations of the divide, when he suggests that the piedmont itself was permanently settled only within the last thousand years. Prümers (Chapter 4.3), meanwhile, working from the Amazonian perspective of the Llanos de Mojos in the same period, finds virtually no evidence whatever of Andean influence in this well-studied region, adjacent to the Altiplano. And Beresford-Jones and Machicado Murillo (Chapter 1.1) invoke the idea of convergent yet independent trajectories across the divide for this later period.

From genetics and cranial morphology, too, there seems strong evidence of differentiation that probably post-dates the Middle Holocene. Strauss (Chapter 2.2) concludes that cranial morphology indicates that the east-west division of South America imposed by the Andean cordillera 'is crucial to understanding the population structure' of the continent as a whole. For their part, Santos (Chapter 3.2) and Barbieri (Chapter 3.3) agree that in all major genetic studies, Central Andean populations appear as a distinctive group. All three authors discuss the various means by which differentiation might have come about, whether through different founder populations, subsequent stochastic drift, functional adaptation to high altitude, or developmental plasticity. Yet Santos emphasizes the consensus that the distinctive genetic pattern found in the Central Andes does not go back to different founder populations or other deep-time processes, but is likely to have developed only much later, again during the second half of the Holocene. Indeed, the latest analysis of ancient DNA (Nakatsuka et al. 2020) also suggests a population structure for the continent with early Holocene roots but which strongly correlates with geography since at least around 2000 Bp. The languages of the Central Andes, too, are of a structural type very different to the languages of Amazonia, even if this opposition is, as Van Gijn and Muysken argue (Chapter 3.5), more complex and geographically incremental than previously thought.

Since the Andes–Amazonia divide detected by many authors grew in substance and resolution over time, it is unsurprising that the authors discussing the most recent periods should find among the clearest evidence for it. Both ethnohistorical chapters, by Tyuleneva (Chapter 5.1) and Bertazoni (Chapter 5.2), find attitudes of cultural superiority already entrenched in the Andes by Inca times, underpinning an already prevailing opposition between their own Andean civilization and a perceived Amazonian 'barbarism'. Bertazoni argues that Amazonia

was nevertheless construed as an integral part of the Inca Empire, and in doing so provides a further clue as to the changing nature of Andes–Amazonia relations after the Spanish Conquest of the 1530s. Pearce (Chapters 5.3 and 5.4) shows that the divide between Andes and Amazonia was a thing of substance under Spanish rule, when abundant documentation leaves little room for doubt that the highlands and the coast constituted Spain's colonial heartlands, with Amazonia little more than a marginal marchland. And yet Bertazoni's last point hints at how much still did change with the European invasions, when the conceptual integration of Amazonia into the native Andean world was discarded by the Spanish, in favour of a still more radical divide setting the highlands (and coast) apart from the eastern lowlands. The Andes–Amazonia divide discussed by these authors was not simply a creation of Spanish colonialism, then, but Europeans did harden and sharpen it, nonetheless.

So if most of our authors see a divide developing between human societies in the Andes and Amazonia subsequent to the Middle Holocene, then what caused it? What was its nature? On this point, contributors tend to return to the 'usual suspects': more intense resource exploitation in the Andes, above all through the expansion of agriculture and irrigation from the (archaeological) Initial Period onwards (after 4000 BP), leading to higher population densities and greater sophistication in social and political organization. For Wilkinson (Chapter 3.1), to cite the key argument once more, these trends gave rise to 'contrasting regional systems with distinctive characteristics – a product of the expansion of imperial states in the highlands and of major linguistic-agricultural complexes in the lowlands'. For Santos (Chapter 3.2), as we have seen, the distinctive genetic profile of Andean populations can best be understood as the consequence of the degree of hierarchical organization of their societies: capable of co-opting labour and resources towards advanced agriculture, armies, and the road networks that fuelled and facilitated the movement of people and their genes around the region. In Amazonia, by contrast, differing degrees of dependence on agriculture, and more varied forms of social and cultural organization, led to different genetic outcomes.

Santos stands alone among our contributors in his willingness to go further, and to suggest an analogy between the human genetics of the Andes and the spread of agriculture and consequent mass movements of peoples, along the lines envisaged by some for the Neolithic transition in Europe. But he and Wilkinson are far from alone in concluding that, in contrast to deeper time periods, the predominant influence along and across the 'divide' in more recent times has been literally a top-down one, from Andes to Amazonia. For Wilkinson, the first permanent human settlement of the piedmont came in the form of colonization from the Andes. For his fellow archaeologist, Herrera, too, the period from 1000 BP witnessed an inversion of Andes—Amazonia relations in the Upper Marañón, with the advent of Andean hegemony there. But Barbieri (Chapter 3.3), in looking at the human genetics specifically of this same piedmont (or 'highland/lowland transitional environment') similarly notes that the predominant direction of gene-flow

across the divide has been from the Andean highlands. And the linguists Van Gijn and Muysken (Chapter 3.5) also observe that contact influences between Andes and Amazonia 'have operated mostly in one direction, from the highland languages into the lowland ones'.

Of course, no monolithic view is presented by our 26 contributors, and there are dissenting voices. Dillehay, McCray and Netherly (Chapter 3.7) call for a wholesale rethinking not only of relations between Andes and Amazonia, but also for taking the Pacific coast separately from the Andean 'co-tradition'. They further call for greater sensitivity to cultural and political dynamics at more local levels. both outside and in relation to broader geographical frames of reference. Among the most numerous voices to entertain significant connections across the divide are those of our linguistic contributors. While recognizing the cohesion of the (Central) Andean languages, Van Gijn and Muysken (Chapter 3.5) suggest that the true divide between these languages and those of Amazonia lies not along the piedmont itself, but rather further to the east, within Amazonia itself. Zariquiey (Chapter 4.2) disproves one outdated claim for a long-distance language relationship across the frontier, but only to advance a tentative hypothesis of a 'Southern Andes-Amazonia' linguistic convergence area instead, suggestive of wider contacts between languages on either side of the divide. And to archaeologists, it will be striking to read Adelaar's suggestion (Chapter 4.1) that Puquina, widely regarded by linguists as probably the primary language of ancient Tiwanaku on the Altiplano, may have originated in part in Amazonia. Tenuous as these associations may be, given how little language data survives on the long-extinct Puquina, many archaeologists will find them beguiling, not least in view of the unexplored Tiwanaku archaeological record of Cochabamba. More generally, however, Adelaar's thesis suggests that the direction of influence was not unremittingly from the Andes to Amazonia over recent millennia.

By far the strongest dissenting voices, however, come from a single discipline, and one moreover that claims to take the widest perspective and to be best placed to integrate the findings of others into its single 'four-field' perspective. The two chapters by distinguished anthropologists, Hornborg (Chapter 1.4) and Zuidema (also an ethnohistorian: Chapter 1.5), take a view substantially different from that expressed in most other contributions. Basing himself on case studies from the second millennium BP or earlier, Hornborg detects a 'recurring pattern' of interaction between Andes and Amazonia that had major social and cultural impacts. Zuidema, too, finds evidence for an Andes-Amazonia culture area or co-tradition, but rather as the reflection of a deep-time cultural continuum stretching from the Andes all the way into central Brazil, and therefore not incongruent with the archaeological record, sparse though that is for such time-depths. Hornborg, meanwhile, further suggests that Amazonian polities may have been as densely populated, extensive and hierarchical in their social and political organization as those of the Andes, so that the very notion of an Andes-Amazonia divide is a myth or an illusion, generated purely by European colonialism, exclusively since the Spanish conquest.

We should be clear here that Hornborg and (somewhat differently) Zuidema represent views held more widely within their discipline and indeed by many Amazonian archaeologists (Chapter 1.1). Participants in the Leipzig conference will recall Bruce Mannheim, a distinguished anthropologist and linguist, and an Andeanist to boot, rising from his chair to state that while he was glad that the conference was taking place, he also very much hoped that it would also be the *last* event on its theme that would ever need to be held. Anthropology, then, came more to bury the Andes–Amazonia divide than to legitimate it, much less to endorse it.

How are we to understand this position, in contrast to that assumed by most contributors from other disciplines? In part, the answer surely lies precisely in different 'ways of seeing' from one discipline to the next. Anthropology, with its focus on cultural and social relations and connections across vastly different geographical and chronological contexts, may be able to perceive such connections where other disciplines do not – or indeed, may take as connections phenomena not necessarily regarded as such by specialists from other fields. The different stance taken by anthropologists in this volume, then, may speak simply to the same diversity of disciplinary methodologies and approaches that provides the core rationale for this book.

Beyond this, however, the chapters by Hornborg and Zuidema do seem to pose challenges, on both sides of this *disciplinary* 'divide'. In presuming comparable populations, scales, and degrees of hierarchical organization for polities in the Andes and in Amazonia, Hornborg bases himself in no small part on the remarkable changes in perception of Amazonian prehistory that have unfolded from recent archaeological investigations and methodological innovations. And yet many archaeological contributors to this book, especially those who focus on later time periods, whether they write from an Andean or an Amazonian perspective, continue to find ample evidence to support the notion of difference in social organization and/or a real divide to either side of the eastern piedmont. This seems to us to support the view of Beresford-Jones and Machicado Murillo (Chapter 1.1), that it 'may be time to rein back on some of the recent hyperbole attending the intensity and chronology of human settlement in Amazonia and to rebalance, somewhat, the pendulum of archaeological perceptions'.

On the other hand, other disciplines cannot simply dismiss the findings of anthropology, of wide-ranging connections and cultural similarities between peoples of the Andes and of Amazonia. Some of Hornborg's evidence for relations and cultural connections across the divide is in fact challenged or controverted in other chapters here: the ostensibly Amazonian iconography at the early highland site of Chavín de Huántar, for example (see Chapter 2.4), or the supposedly common origins of raised field agriculture in the eastern lowlands and on the Altiplano (see Chapter 4.3). But other evidence finds no ready response, including anthropomorphic sculptures found both in southern Colombia and on the lower Amazon that are so similar as to suggest 'direct emulation', for Hornborg. Zuidema's discussion of striking similarities between the cultural systems of the Incas and of contemporary

peoples living deep in Brazilian Amazonia, too, cries out for further exploration and explanation. And these authors' chapters and arguments are the more powerful for complementing each other across very different time frames. Zuidema deals with deep time; Hornborg primarily with the second millennium BP.

To conclude: the chapters in this volume were shaped by intense crossdisciplinary discussions, and though they take particular disciplinary standpoints, they were written with sensitivity to and with a view to informing other disciplines. The overall effect is one of independent verification and validation of findings, to the degree that most chapters, whatever their disciplinary perspective, point to similar conclusions. By late prehistory, the peoples of the Andes and Amazonia had distinct genetic heritages and spoke languages that respected a divide between the two regions, both in their origins and expansions and in their convergence towards broad structural types. This is surely suggestive of a separation and differentiation that had proceeded over millennia. Moreover, their artistic and architectural styles, manifest in ceramics, buildings or settlement planning, corresponded to different autochthonous traditions, with little mutual overlap. Several scholars in this volume also incline towards the view that in the Andes, population densities were higher, and social and political organization larger-scale and more complex. There is no consensus on this, although there is (ethnohistorical) evidence that the two populations did indeed view each other differently, and that Andeans saw themselves as culturally superior. In any case, contacts and communication between Andeans and Amazonians seem to have been very substantially more limited than among the different peoples within each group. This seems to hold true even though some flow of both people and goods certainly did cross the divide in prehistory. Indeed, in some cases, the *lack* of influence, and presumably even of much real communication, between Andes and Amazonia seems striking - the paradigm case being that of the Llanos de Mojos.

Some conspicuous similarities in aspects of the cultures of different peoples very far to either side of the eastern piedmont require explanation. We also recognize the dissenting voices among our contributors, as well as the simplification that comes with summarizing work of such range and complexity in just a few short paragraphs. Overall, however, we are confident that the Andes–Amazonia divide is more than simply the product of European colonialism or of scholarly blinkeredness. On the contrary, it formed part of the lived experience of peoples both of highlands and lowlands in prehistoric times. In reaching this conclusion, we are aware that we are controverting much of the recent thinking deriving from anthropology and (Amazonian) archaeology. But we will end by noting that we are the more confident in doing so, for basing our view on work deriving not from any single author, nor any single discipline, but from many.