### ANDRÉS VÉLEZ-POSADA

# Contact Zones for a Global History of Knowledge

## ▼ FORUM ARTICLE in Decentering the History of Knowledge

▼ ABSTRACT Among the various research and writing challenges that a global history of knowledge entails, the geographical question of how to assess the global knowledges from their local contexts requires particular attention. By considering different and recent historiographical backgrounds, in this article I contend that the concept of "contact zones" holds significant profitability, since it provides a valuable framework for writing compelling stories about the dynamics of the multifaceted processes involved in the creation, transmission, and transformation of knowledges in a world characterized by diversity and interdependence. Early modern Spanish America is highlighted here as an exemplar case for analyzing the practices of exchange, translation, and negotiation emerging in contact zones of knowledges.

▼ KEYWORDS Contact Zones; Early Modern Knowledges; Early Modern Spanish America; Global History; Geography of Knowledge

▼ ISSUE Volume 5 (2024)

Andrés Vélez-Posada • Universidad EAFIT, CO, avelezp6@eafit.edu.co

**Cite this article:** Andrés Vélez-Posada, 'Contact Zones for a Global History of Knowledge', *Journal for the History of Knowledge*, 5 (2024), 209–218 <https://dx.doi.org/10.55283/jhk.18612>

DOI: 10.55283/jhk.18612

This is an open access article made available under a cc by 4.0 International License. © 2024, The Author(s). Published by Gewina in collaboration with Brepols Publishers.



In the last decades, decentering knowledge production in time and space has been an endeavor cherished by historians of knowledge. Instead of providing a single, all-encompassing synthesis of how science developed through time and space as a singular, autonomous entity, historians have underlined the fact that modern science represents a situated regime of knowledge which should be examined through its contextualized negotiations with other cultural ways of knowing.<sup>1</sup> As a result of this methodological approach, new histories of knowledge-making, including belief systems, technologies, and artisan practices, have suspended the aspiration for a big narrative, such as the foundational myth of an early modern European Scientific Revolution, to propose analysis and stories of a multipolar world in which the cognitive and social operations for knowledge production must be characterized as localized, exchanged, translated, transformed, and appropriated across cultures, and in a global frame.<sup>2</sup> As Lorraine Daston has said, this methodology "allows historians to follow practices wherever they may lead, however remote these may be from anything resembling latter-day science."<sup>3</sup> Even if this démarche could multiply historical research into singular stories, trajectories, and cases lacking the larger picture of a universal narrative, it significantly avoids the historiographical erasure of different actors, traditions, disciplines, politics, geographies, and materials participating in epistemic enterprises.

The epistemological, political, and ethical claim of the global turn of the history of knowledge might be put as follows: Any kind of knowledge, beyond the logical form it may have, is always historically, geographically, and bodily situated, connected, and distributed. This means any description and conceptualization aiming at understanding the practices and operations of knowledges regimes must deal with and be aware of their social mediations, political institutions, and cultural meanings.<sup>4</sup> In doing research, historians of knowledge organize their historical evidence to tell and problematize, in a thick contextualized manner, the negotiated or imposed trajectories in which the social construction of knowledge is made through entangled and heterogenous historical geographies and cultures.<sup>5</sup> In that sense, current history of knowledge aspires for global histories with plural perspectives highlighting the "encounters, clashes, translations, and hybridizations" of knowledge among actors (human and more-than-human), while being critical of any attempt to create a universal history of humanity based on an idealistic, diffusionist, individualistic, or ethnocentric conception of knowledge.<sup>6</sup>

<sup>1</sup> See for instance, Pestre, "Écrire une Histoire."

<sup>2</sup> Romano, "The History Manifesto."

<sup>3</sup> Daston, "The History of Science," 143.

<sup>4</sup> Haraway, "Situated knowledges."

<sup>5</sup> Schaffer, "Ceremonies of Measurement."

<sup>6</sup> Burke, *What is the History*, 269. For other accounts of this global turn, see Shapin, "Placing the view"; Chartier, "Sciences et savoirs," 460–64; Van Damme, "Practices, Places and Materiality."

Among the various research and writing challenges that such a history of knowledge entails, the geographical question of how we should assess the global knowledges (and the process of globalization of knowledges) from their local contexts requires particular attention. Through actors and practices, cultures put in motion their knowledge in different places, creating contacts and exchanges within their people and with other cultures. From an historical perspective, societies are always not only controlling, preserving, and validating their own knowledge authorities, but foremost negotiating, distinguishing, and adapting their ways of knowing with other societies. In that regard, the focus on the geographies of knowledge allows us to overtake the so-called cultural incommensurability of epistemic practices (which leads, in my opinion, to a rather parochial, nationalistic, genealogical, and essentialist conception of knowledge), emphasizing instead the dynamics of the encounters, disseminations, learnings, and impositions occurring in "public arenas" of "societal circulation" where different actors, audiences, materials, and practices meet.<sup>7</sup>

One of the main interests of historians of knowledge has been to explore the "contact zones," and their related "trading zones," in which different, coexisting agents confronted, contested, learned, adapted, or repudiated one another's knowledges, with often unequal reciprocity.<sup>8</sup> I contend that such contact zones allow the history of knowledge to give greater meaning to the multiplication of singular, local stories and cases by illuminating the epistemic exchanges in different historical realms such as market places, coffeehouses, taverns, labs, libraries, workshops, households, courts, pulpits, frontiers, mines, war zones, ships, botanical gardens, museums, academies, or libraries, but also television, social media, books, journals, or maps.<sup>9</sup>

I like to think that the writing of the global history of knowledge could follow the lead of Donna Haraway's propositions about the diffractive shares of local and global in the world-making:

You cannot even begin to think the complexity of capitalism as this earthmaking thing without going to the trade zones in the Indian Ocean in the fifteenth century, the many world-making trading zone and wealth accumulation zones and inventions of plantations agriculture, and the moving of plants and animals and microbes and people around, and the deforesting of the river basins in the sixteenth century.<sup>10</sup>

In that sense, histories of knowledges are to be considered as meaningful, local, situated practices with plural transfers, or even as circulating commodities, and as a "webbed ecosystems made of variously configured, historically dynamic

<sup>7</sup> Östling and Larsson Heidenblad, "Fulfilling the Promise"; on knowledge on the move and its dissemination, see Burke, *What is the History*, 171–209.

<sup>8</sup> Kontler et al., Negotiating knowledge, 1.

<sup>9</sup> Jacob, Qu'est-ce qu'un lieu.

<sup>10</sup> Haraway, Manifestly Haraway, 239.

contact zones.<sup>"11</sup> A global history of knowledge must therefore be committed to analyze how knowledge inherits and relates to other distant or neighboring cultures, at once on a transnational scale and in specific sites of contact zones.

In what follows, I would like to present the relevance of the "contact zone" and, afterwards, how we may see an application of this concept in the recent historiography of early modern Spanish America.

The contact zone is a key term issued from postcolonial studies that has been applied to analyze travel writing in the age of empire expansion.<sup>12</sup> It was first proposed by Mary Louise Pratt, who defined it as a "social space where disparate cultures meet, clash, and grapple with each other, often in highly asymmetrical relations of domination and subordination [...] It invokes the space and time where subjects previously separated by geography and history are co-present, the point at which their trajectories now intersect."<sup>13</sup> The value of this concept for the global history of knowledge lies in its capacity to emphasize the movable and entangled nature of knowledge systems.<sup>14</sup> Although Pratt used this term to refer to relations among colonizers and colonized, travelers and travelees, it can be broadened to designate the creative, controversial, transactional, and transformative potential of any spatial arrangement or performative arena (geographic, architectural, or even intertextual) in which different people and knowledges encounter one other.<sup>15</sup> By definition, contact zones are ever changing and relational, enabling disruptions, adaptations, and innovations of the practices of knowledge. Since those sites are not determined by vertical relations of power, irony and power reversal could occur when, for instance, marginal groups select and invent from materials and practices transmitted to them by dominant cultures.<sup>16</sup>

Sensitivity to contact zones has led historians of science to propose the more specific term of "trading zone" to further focus on sites of communication and collaboration between knowledge actors, particularly among skilled and learned individuals. This concept was first used by anthropologist Michael Taussig to refer to the transactional spaces between peasants and landowners in the Cauca valley in Colombia.<sup>17</sup> But in his work on twentieth-century microphysics, historian of science Peter Galison has applied it to describe the ways in which experimental and theoretical physicists have the ability to conversate "at the overlapping boundaries of their respective discipline."<sup>18</sup> More recently, Pamela O. Long has identified flourishing trading zones for the history of knowledge in early modern Europe such as mining districts, arsenals, and

<sup>11</sup> Ibid, 250.

<sup>12</sup> Lindsay, "Contact zone."

<sup>13</sup> Pratt, Imperial Eyes, 7, 8.

<sup>14</sup> See, for instance, Livingstone, "Landscapes of knowledge," 15.

<sup>15</sup> Lindsay, "Contact zone," 55.

<sup>16</sup> Pratt, Imperial Eyes, 7; Lindsay, "Contact zone," 56.

<sup>17</sup> Taussig, The Devil, 126–39.

<sup>18</sup> Long, "Trading Zones," 841; Galison, Image and Logic, 781-844; Galison, "Trading with the Enemy."

princely courts, and has defined them as "arenas in which artisans and other practitioners (trained as apprentices in workshops or in hands-on instruction at, say, construction sites) and learned men (trained in Latin at universities and other institutions) engaged in substantive communication and shared their respective expertise."19 Following Long's employment of the concept, a trading zone differentiates from a contact zone because it does not develop anywhere, but under specific circumstances, such as locales in which new technologies are being developed or where enterprise is undertaken with state and shareholder investment. "In a trading zone, each party has a particular knowledge or skill that the other side values as something they would like to possess or use in their own work or thinking."20 Accordingly, any trading zone has a value of reciprocity and mutual interest that does not necessarily occur in all contact zones, although the former might well be taken as a derivative of the latter. In summary, trading zones allow a nuanced understanding of the interconnection of multifaceted itineraries, arrangements, and crossings of knowledge repositories that combine for different purposes.

The cultural and geographical reality of early modern Spanish America serves as an excellent case for the study and writing of contact zones in the global history of knowledge due to its rich and complex history of encounters between diverse cultural, social, and intellectual traditions. Spanish America was home to a vast array of indigenous cultures, each with its own knowledge systems, languages, and traditions. The interactions between these diverse cultures and the Spanish subjects created dynamic contact zones where different ways of understanding the world came into contact. Besides, as has been illuminated by recent historiography on early modern empire-building, the composite nature of the political and social space of the so-called Spanish "universal monarchy" elicited a global and heterogenous array of spaces of mobility and exchange for authority, negotiations, communications, and interactions, such as in the American viceroyalties.<sup>21</sup>

The diffusionist model has, therefore, been strongly dismissed and replaced by complex schemes that not only debate the center-periphery unidirectionality of knowledge production, movement, and sociability processes in the Americas but also relativize the Peninsula-Viceroyalties axis, proposing multidimensional schemes of relationships and scales between different contact zones in viceregal areas.<sup>22</sup> Alongside asserting the place of the Iberian world in the history of knowledge, the historiography of early modern Spanish America's knowledge has positioned epistemic activity not only as the result of

<sup>19</sup> Long, "Trading Zones," 842; see also, Long, Openness, 15, 211, and 234–46.

<sup>20</sup> Long, "Trading Zones," 843.

<sup>21</sup> Cañizares-Esguerra, Nature; Portuondo, Secret Science; Brendecke, Imperio e información; Nieto Olarte, Las Máquinas; Vélez-Posada and Labarca, "Saberes en las Américas"; Ruíz Ibáñez, Hispanofilia; Gruzinski, Quand les Indiens.

<sup>22</sup> Gorbach and López Beltrán, Saberes locales, 11–38; Barrera-Osorio and Nieto Olarte, "Ciencia, tecnología."

an imperial project but also as a series of situated processes carried out by the active variety of agents and cultures that participated in the formulation of empirical knowledge, with contributions that cannot be reduced to a unidirectionality of transfer but are grounded in processes of intermediation, translation, attribution, and erasure.<sup>23</sup> In this sense, and without the exclusive desire to denounce the known imposition and power asymmetry of the colonial space, I believe that the geographical turn and methodological discussion given by global history are crucial to understanding the interest of pointing out phenomena of connection and integration as effects of changes on a global scale, beyond the manufacturing of patriotic identities.<sup>24</sup>

Among the cultural mediations emerging in contact zones and trading zones, cultural translation has recently played a major role in the history of early modern Spanish America.<sup>25</sup> Cultural translation in contact zones refers to the processes through which ideas, practices, and knowledge from one culture are interpreted, adapted, and rearticulated in the context of interactions with another culture. This translation involves not just linguistic translation but also the adaptation of meanings, contexts, and conceptual frameworks across cultural boundaries, such as the translation of tacit knowledge of artisanal practices into verbal and visual forms.<sup>26</sup> For instance, the visual and linguistic translations examined in the collective volume edited by Ralph Bauer and Jorge Marroquín Arredondo shed light on the geopolitics of appropriation within the production, movement, and transformation of knowledge from, to, and within the Americas. As they assert, the period previously known as the age of discovery could be rewritten as an age of translation-multicentered, transoceanic, and transcultural.<sup>27</sup> This work shows how the mobility of knowledge through translation practices gave rise to cultural anxiety, rivalry, suspicion, suppression, and resistance. Sensitive to the complexities of translation processes in the Portuguese and Spanish worlds, Allison Bigelow's recent work is another example that underlines the importance of cultural exchange in the ideas and naming practices of Iberian metallurgical knowledge. By paying attention to mining districts and vocabularies, Bigelow presents the "ways in which miners throughout the Iberian world understood the animacy of matter and the ability of metallic objects to shape human experiences."28 With an experimental approach to colonial archives, Bigelow recreates missing sources and closely reads iconographic and textual documents to remediate the erasure

<sup>23</sup> O'Phelan Godoy and Salazar-Soler, Passeurs; Asúa, Vanished Arcadia; Slater et al., Medical Cultures; Gómez, The Experiential Caribbean.

<sup>24</sup> Conrad, What is Global History?

<sup>25</sup> Cunill and Glave Testino, Las lenguas. For translation as an art of the contact zone, see Pratt, "Arts."

<sup>26</sup> This has also been signaled for the case of early modern Europe. Cook and Dupré, *Translating Knowledge*; Newman and Tylus, *Cultures of Translation*; Long, "Trading Zones," 847; Smith, *From Lived Experience*.

<sup>27</sup> Marroquín Arredondo and Bauer, Translating Nature, 2.

<sup>28</sup> Bigelow, Mining Language, 8.

of the active role of indigenous actors. Without denying the colonial violence of imperial powers, Bigelow shows that Iberian empires were less a monolithic imposition from above, and more a dynamic, multicultural, and locally defined building process. The result is an encompassing picture of a shared knowledge economy knitted together through cross-cultural communication.

In conclusion, the concept of contact zones holds significant profitability for the global history of knowledge, providing a valuable framework for writing compelling stories about the dynamics of the multifaceted processes involved in the creation, transmission, and transformation of knowledge in a world characterized by diversity and interdependence. Instead of viewing knowledge as a unidirectional flow from a particular center or authority, the notion of contact zones recognizes the complexity of interactions, negotiations, and exchanges that occur in local spaces where diverse cultures, ideas, and practices intersect. Contact zones emphasize the role of mediation, interaction, and effective communication in the creation and dissemination of knowledge. This perspective sheds light on the importance of intermediaries, translators, and cultural brokers in facilitating the exchange and adaptation of ideas between different communities, and how marginalized voices may actively contribute to intellectual developments, exploring their identities, motivations, political agendas, networks, and legitimization strategies. Finally, the concept also underscores the idea of cultural hybridity, where diverse cultural elements blend and contribute to the formation of new knowledge.

## About the Author

Andrés Vélez-Posada is Full Professor of Humanities at Universidad EAFIT (Medellin, Colombia). He works on the history of knowledge in early modern Europe and Spanish America, with a particular focus on the production, adaptation, and politics of philosophical, medical, geographical, and metallurgical knowledges in tropical contexts.

## **Bibliography**

- Asúa, Miguel de. Science in the Vanished Arcadia: Knowledge of Nature in the Jesuit Missions of Paraguay and Río de la Plata. Leiden: Brill, 2014.
- Barrera-Osorio, Antonio, and Mauricio Nieto Olarte. "Ciencia, tecnología, saberes locales e imperio en el mundo atlántico, siglos XV–XIX." *Historia Crítica* 73, no. 1 (2019): 3–20.
- Bigelow, Allison Margaret. *Mining Language: Racial Thinking, Indigenous Knowledge, and Colonial Metallurgy in the Early Modern Iberian World*. Williamsburg and Chapel Hill, NC: Omohundro Institute of Early American History and Culture, and University of North Carolina Press, 2020.

- Brendecke, Arndt. *Imperio e información: funciones del saber en el dominio colonial español.* Madrid: Iberoamericana; Frankfurt: Vervuert, 2012.
- Burke, Peter. What is the History of Knowledge? Cambridge: Polity Press, 2016.
- Cañizares-Esguerra, Jorge. *Nature, Empire, and Nation: Explorations of the History of Science in the Iberian World*. Stanford, CA: Stanford University Press, 2006.
- Chartier, Roger. "Sciences et savoirs." *Annales: Histoire, Sciences Sociales* 71, no. 2 (2016): 451–64. DOI: https://doi.org/10.1353/ahs.2016.0065.
- Conrad, Sebastian. *What is Global History*?. Princeton, NJ: Princeton University Press, 2017.
- Cook, Harold J., and Sven Dupré, eds. *Translating Knowledge in the Early Modern Low Countries*. Zurich: LIT Verlag, 2012.
- Cunill, Caroline, and Luis Miguel Glave Testino, eds. *Las lenguas indígenas en los tribunales de América Latina: intérpretes, mediación y justicia (siglos XVI–XXI)*. Bogotá: Instituto Colombiano de Antropología e Historia, 2019.
- Daston, Lorraine. "The History of Science and the History of Knowledge." *KNOW: A Journal on the Formation of Knowledge* 1, no. 1 (2017): 131–54.
- Galison, Peter. "Trading with the Enemy," in *Trading Zones and Interactional Expertise: Creating New Kinds of Collaboration*, edited by Michael E. Gorman, 25–52. Cambridge, MA: MIT Press, 2010.
  - ———. A Material Culture of Microphysics. Chicago, IL: University of Chicago Press, 1997.
- Gómez, Pablo F. *The Experiential Caribbean: Creating Knowledge and Healing in the Early Modern Atlantic.* Chapel Hill, NC: University of North Carolina Press, 2017.
- Gorbach, Frida, and Carlos López Beltrán, eds. Saberes locales: Ensayos sobre historia de la ciencia en América Latina. Zamora de Hidalgo: El Colegio de Michoacán, 2008.
- Gruzinski, Serge. Quand les Indiens parlaient latin: Colonisation alphabétique et métissage dans l'Amérique di XVIe siècle. Paris: Fayard, 2023.
- Haraway, Donna J. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14, no. 3 (1988): 575–99.
- Jacob, Christian. *Qu'est-ce qu'un lieu de savoir?*. Marseille: Open Edition Press, 2014. DOI: https://doi.org/10.4000/books.oep.423.
- Kontler, László, Antonella Romano, Silvia Sebastiani, and Borbála Zsuzsanna Török, eds. *Negotiating Knowledge in Early Modern Empires: A Decentered View*. New York: Palgrave Macmillan, 2014.
- Lindsay, Claire. "Contact zone." In *Keywords for Travel Writing Studies: A Critical Glossary*, edited by Charles Forsdick, Zoë Kinsley, and Kathryn Walchester. London: Anthem Press, 2019, 54–56.
- Livingstone, David N. "Landscapes of knowledge." In *Geographies of Science*, edited by Peter Meusburger, David N. Livingstone, and Heike Jöns, 3–22. Dordrecht: Springer, 2010.
- Long, Pamela O. "Trading Zones in Early Modern Europe." *Isis* 106, no. 4 (2015): 840-47.

—. Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from

Antiquity to the Renaissance. Baltimore, MD: Johns Hopkins University Press, 2003. Marroquín Arredondo, Jaime, and Ralph Bauer, eds. *Translating Nature: Cross-Cultural Histories of Early Modern Science*. Philadelphia, PA: University of Pennsylvania Press,

Newman, Karen, and Jane Tylus, eds. *Early Modern Cultures of Translation*. Philadelphia, PA: University of Pennsylvania Press, 2015.

2019.

- Nieto, Olarte. Las máquinas del imperio y el reino de Dios: Reflexiones sobre ciencia, tecnología y religión en el mundo atlántico del siglo XVI. Bogotá: Uniandes, 2013.
- O'Phelan Godoy, Scarlett, and Carmen Salazar-Soler, eds. *Passeurs, mediadores culturales y agentes de la primera globalización en el mundo ibérico, siglos XVI–XIX*. Lima: Pontificia Universidad Católica del Perú, 2005.
- Östling, Johan, and David Larsson Heidenblad. "Fulfilling the Promise of the History of Knowledge: Key Approaches for the 2020s." *Journal for the History of Knowledge* 1, no. 1 (2020): 3. DOI: https://doi.org/10.5334/jhk.24.
- Pestre, Dominique. "Écrire une *Histoire des sciences et des savoirs* de longue durée." In *Histoire des sciences et des savoirs: 1. De la Renaissance aux Lumières*, edited by Dominique Pestre and Stéphane Van Damme, 9–15. Paris: Éditions du Seuil, 2015.
- Portuondo, María M. Secret Science: Spanish Cosmography and the New World. Chicago, IL: University of Chicago Press, 2009.
- Pratt, Mary Louise. "Arts of the Contact Zone." Profession (1991): 33-40.
- . *Imperial Eyes: Travel Writing and Transculturation*. New York and London: Routledge, 2008.
- Romano, Antonella. "*The History Manifesto*, History of Science, and Big Narratives: Some Pending Questions." *Isis* 107, no. 2 (2016): 338–40. DOI: https://doi.org/10.1086/687180.
- Ruíz Ibáñez, José Javier. *Hispanofilia: los tiempos de la hegemonía española*. Madrid: Fondo de Cultura Económica, 2023.
- Schaffer, Simon. "Ceremonies of Measurement: Rethinking the World History of Science." Annales: Histoire, Sciences Sociales 70, no. 2 (2015): 335–60. DOI: http://doi.org/10.1017/S2398568200001205.
- Shapin, Steven. "Placing the View from Nowhere: Historical and Sociological Problems in the Location of Science." *Transactions of the Institute of British Geographers* 23, no. 1 (1998): 5–12. DOI: http://doi.org/10.1111/j.0020-2754.1998.00005.x.
- Slater, John, Maríaluz López-Terrada, and José Pardo-Tomás, eds. *Medical Cultures in the Early Modern Spanish Empire*. Farnham: Ashgate, 2014.
- Smith, Pamela H. From Lived Experience to the Written Word: Reconstructing Practical Knowledge in the Early Modern World. Chicago, IL: University of Chicago Press, 2022.
- Taussig, Michael T. *The Devil and Commodity Fetishism in South America*. Chapel Hill, NC: University of North Carolina Press, 2010.

- Van Damme, Stéphane. "When Practices, Places and Materiality Matter: A French Trajectory in the History of Knowledge." *Journal for the History of Knowledge* 1, no. 1 (2020): 4. DOI: https://doi.org/10.5334/jhk.26.
- Vélez-Posada, Andrés, and Mariana Labarca. "Saberes en las Américas: Cruces, trayectorias y zonas de intercambio." *Varia Historia* 38, no. 78 (2022): 645–57. DOI: http://dx.doi.org/10.1590/0104-87752022000300002.