

Timing and the Conquest of Mexico

Sincronización y Conquista de México

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RESUMEN La Conquista de México es considerada en general como una secuencia secular de acontecimientos que no determinaron por sí solos su sincronización. Varios ciclos afectaron profundamente el tiempo y las consecuencias de ellos. Teniéndolos en cuenta, arrojan éstos nueva luz sobre las estrategias empleadas tanto por los españoles como por sus aliados indios, los cuales han sido poco considerados hasta ahora. Reevaluar la Conquista en los términos de estos ciclos temporales contribuirá a que muchos de los grandes eventos de ella puedan entenderse con mayor facilidad.

PALABRAS CLAVE Conquista, huracanes, periodos de guerra, ciclos calendáricos, apoyo logístico

ABSTRACT The conquest of Mexico is generally viewed as a secular sequence of events but these alone did not determine its timing. Several temporal cycles profoundly affected the timing and consequences of both these battles and their outcome. Considering these cycles throws new light on the strategies employed by both the Spaniards and their Indians allies that have hitherto been little considered. By reassessing the Conquest in terms of these temporal cycles, the rationale for when many of the Conquest's major events can be more readily understood.

KEYWORDS Conquest, hurricanes, war season, calendar cycles, logistical support

Timing and the Conquest of Mexico¹

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When the Aztec empire was encountered, fought, and conquered is generally accepted without much consideration, as though it followed logically from the previous Spanish expansion into the Gulf of Mexico and Caribbean. In at least some sense, that expansion was probably inevitable, giving the growing Spanish population in the West Indies and the avarice that drew them there. But whether the Conquest itself happened in 1521, as it did, or might as easily have occurred a few years earlier or later, is largely unimportant; very little is likely to have changed in the social, political, or technological situations of their side in the interim that would have materially affected the events to follow.

This is not to say that timing is unimportant, and indeed, when the conquest occurred *within* the year was crucial, yet this temporal placement has been given little serious consideration. Instead, the Conquest have largely been repeated, with the dates of the various incidents, without question or consideration of their significance.

The conquest of Mexico was a pivotal event in the history of the New World and from a number of accounts by the participants, the dates and sequence of these events seem fairly well known.² But beyond using these dates to situate the various events of the Conquest, they have drawn scant attention. Yet timing is a crucial element whose consideration throws new light on the conquest of Mexico.

Because the popular image of Conquest is one of a relatively quick battle culminating in Spanish victory, a brief summary of those events is in order to set the stage for a reconsideration in its timing.

1 I would like to thank Dr. Tim Pauketat for having read and helpfully commented on an earlier draft of this paper.

2 For a fuller discussion of the events of the Conquest and references to the original sources, see Ross Hassig, *Mexico and the Spanish Conquest*, Norman, University of Oklahoma Press, 2006.

OVERVIEW OF THE CONQUEST

Although the full pacification of Mexico was a lengthy process, requiring many years, the generally recognized date of the conquest of Mexico is 13 August 1521, the day that Hernán Cortés recorded the Aztec ruler, Cuauhtemoc, surrendered to him.³ His was not, however, the first expedition to reach Mexico. Two earlier expeditions had sailed for coastal Mesoamerica from Cuba, one embarking in February 1517 and the other in April 1518.⁴ Cortés's expedition in 1519 was the third and sailed from Cuba on 10 February 1519 and first landed in Yucatan.⁵ Touching at various places along the coast, they eventually reached the central Gulf coast of Mexico on 21 April 1519 and allied with the Totonacs who inhabited the coast of present-day Veracruz.⁶ Against the orders of Governor Diego Velásquez de Cuéllar of Cuba, Cortés established and fortified the settlement of Vera Cruz, where he left a third of his approximately 450 men. Then, on 18 August, also against Velázquez's orders, Cortés began his march inland toward the Aztec capital of Tenochtitlan with about 300 men plus 40 or 50 Cempohualtec warriors

3 Hernán Cortés, *Cartas y documentos*, Mexico City, Porrúa, 1963.

4 Juan Díaz, "Itinerario de Juan de Grijalva," In Agustín Yáñez, *Crónicas de la Conquista de México*, Mexico City, Universidad Nacional Autónoma de México, 1950, p. 5, 7, 10; Bernal Díaz del Castillo, *Historia verdadera de la Conquista de la Nueva España*, 2 v., Mexico City, Porrúa, 1977, v. 1, p. 45; Peter Martyr d'Anghera, *De Orbe Novo: The Eight Decades of Peter Martyr D'Anghera*, 2 v., New York, Burt Franklin, 1970, v. 2, p. 12; Gonzalo Fernández de Oviedo y Valdés, *Historia general y natural de las Indias*, 5 v., Madrid, Atlas, 1959, v. 2, p. 118-125.

5 Díaz del Castillo, *Historia verdadera*, v. 1, p. 94; Francisco López de Gómara, *Historia general de las Indias*, 2 v., Barcelona, Obras Maestras, 1965-1966, v. 2, p. 21; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 26; Andrés de Tapia, "Relación de Andrés de Tapia," In Agustín Yáñez, *Crónicas de la Conquista de México*, Mexico City, Universidad Nacional Autónoma de México, 1950, p. 31-33, 45-47.

6 José de Acosta, *Obras*, Madrid, Atlas, 1954, p. 238; Francisco de Aguilar, *Relación breve de la Conquista de la Nueva España*, Mexico City, Universidad Nacional Autónoma de México, 1977, p. 67; "Anales de Cuauhtitlan," In *Códice Chimalpopoca: Anales de Cuauhtitlan y Leyenda de los Soles*, Mexico City, Universidad Nacional Autónoma de México, 1975, p. 68; San Antón Muñón Chimalpahin Cuauhtlehuantzin, *Relaciones originales de Chalco Amaquemecan*, Mexico City, Universidad Nacional Autónoma de México, 1965, p. 121, 234; Cortés, *Cartas y documentos*, p. 19; Díaz del Castillo, *Historia verdadera*, v. 1, p. 122, 125-126; López de Gómara, *Historia general*, v. 2, p. 52-53; Tapia, "Relación," p. 40.

and 200 Indian porters. On 2 September, he reached the boundary of Tlaxcallan, where he clashed with Tlaxcaltec forces. During the following three weeks, Spanish and Tlaxcaltec forces fought a series of engagements. The Tlaxcaltecs mobilized far larger forces but only the foremost soldiers could bring their weapons to bear, and Spanish crossbows, harquebues, and falconets effectively disrupted these formations. Once breached, the Tlaxcaltec formations were vulnerable and could not sustain their attack lest they be penetrated and their flanks turned. The Spaniards, however, were too few to mount an effective offense, so the two sides were apparently stalemated. The strategic situation, however, was decidedly against Cortés who had lost over 45 of his Spaniards and was nearly out of food. But after many days of fighting, an alliance was struck which Cortés claimed as his victory but was undoubtedly a Tlaxcaltec initiative.⁷

Tlaxcallan was locked in a long-term struggle with the Aztecs which it was losing when the Spaniards appeared.⁸ The tide of battle had swung so far against the Spaniards that had the Tlaxcaltecs persisted, attrition alone guaranteed their rapid destruction. But recognizing that Spanish arms could penetrate their formations, the Tlaxcaltecs decided to ally with this small Spanish force. Breaching opposing formations in central Mexican wars was difficult as both sides employed similar arms, armor, and tactics, but the Tlaxcaltecs realized they could use the Spaniards to open breaches in the Aztec lines that their own far larger forces could then exploit.

The Spaniards remained in Tlaxcallan for two weeks before marching for nearby Cholollan on 10 October. Admitted to that city, Cortés claimed the leaders plotted to kill the Spaniards so he assembled them in the city's main courtyard and massacred the king and hundreds of his nobles. This episode was, in all likelihood, prompted by the Tlaxcaltecs both to test Cortés's allegiance to them and to return a now hostile city to its previous alliance with Tlaxcallan.⁹

7 Díaz del Castillo, *Historia verdadera*, v. 1, p. 189-198.

8 Díaz del Castillo, *Historia verdadera*, v. 1, p. 225-227; López de Gómara, *Historia general*, v. 2, p. 115-116; Tapia, "Relación," p. 55-56.

9 Aguilar, *Relación breve*, p. 76-79; Chimalpahin, *Relaciones originales*, p. 234; Cortés, *Cartas y documentos*, p. 48-49; Díaz del Castillo, *Historia verdadera*, v. 1, p. 230-245; Fernando de Alva Ixtlilxochitl, *Obras completas*, 2 v., Mexico City, Universidad Nacional

Two weeks later, Cortés resumed his march to Tenochtitlan and in another two weeks, he marched over a causeway and entered the island city on 8 November 1519.¹⁰ He and his men were welcomed, but within days, on 14 November, Cortés seized the ruler, Moteuczoma Xocoyotl (conventionally but erroneously spelled Montezuma), and thereafter effectively ruled through him for the next eight months.¹¹

Since Cortés had violated his orders, Governor Velásquez sent a punitive expedition to retrieve him, lead by Pánfilo de Narváez, who landed at Vera Cruz on 20 April 1520.¹² Learning of this, Cortés left his Indian allies in Tenochtitlan and led 266 Spaniards to the coast where he defeated Narváez at the end of May, though his victory owed more to bribes and treachery than martial prowess.¹³

Autónoma de México, 1975-1977, v. 2, p. 214-216; López de Gómara, *Historia general*, v. 2, p. 116-122; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 78-82; Diego Muñoz Camargo, "Descripción de la ciudad y provincia de Tlaxcala," In René Acuña, *Relaciones geográficas del siglo XVI*, Mexico City, Universidad Nacional Autónoma de México, 1982-1987, v. 4, p. 247-251; Oviedo y Valdés, *Historia general*, v. 4, p. 22-23; Bernardino de Sahagún, *Florentine Codex: General History of the Things of New Spain. Book 12--The Conquest of Mexico*, Salt Lake City, University of Utah Press, 1975, p. 29; Bernardino de Sahagún, *Conquest of New Spain: 1585 Revision*, Salt Lake City, University of Utah Press, 1989, p. 57-58; Tapia, "Relación," p. 56-61.

10 Acosta, *Obras*, p. 240; Aguilar, *Relación breve*, p. 79-80; Alvarado Tezozómoc, *Crónica mexicáyotl*, Mexico City, Universidad Nacional Autónoma de México, 1975, p. 148-149; Chimalpahin, *Relaciones originales*, p. 121, 235; Cortés, *Cartas y documentos*, p. 55-58; Díaz del Castillo, *Historia verdadera*, v. 1, p. 259-263; Diego Durán, *Historia de las Indias de Nueva España e islas de la Tierra Firme*, 2 v., Mexico City, Porrúa, 1967, v. 2, p. 536, 541; Ixtlilxochitl, *Obras completas*, v. 1, p. 451, v. 2, p. 217-218; López de Gómara, *Historia general*, v. 2, p. 128-130; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 89-90, 93-94; Diego Muñoz Camargo, *Historia de Tlaxcala*, Guadalajara, Edmundo Aviña Levy, p. 215; "Descripción," v. 4, p. 251; Oviedo y Valdés, *Historia general*, v. 4, p. 30-31; Sahagún, *Florentine Codex, Book 12*, p. 43-44; Sahagún, *1585 Revision*, p. 65-69; Tapia, "Relación," p. 59.

11 Acosta, *Obras*, p. 240; Aguilar, *Relación breve*, p. 80; Cortés, *Cartas y documentos*, p. 59-60; Díaz del Castillo, *Historia verdadera*, v. 1, p. 264-265, 267-269; Ixtlilxochitl, *Obras completas*, v. 2, p. 218; López de Gómara, *Historia general*, v. 2, p. 131.

12 Aguilar, *Relación breve*, p. 83; Cortés, *Cartas y documentos*, p. 81-82; Díaz del Castillo, *Historia verdadera*, v. 1, p. 333, 336; López de Gómara, *Historia general*, v. 2, p. 180; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 127; Muñoz Camargo, *Historia de Tlaxcala*, p. 215; Oviedo y Valdés, *Historia general*, v. 4, p. 52-53; Tapia, "Relación," p. 75.

13 Aguilar, *Relación breve*, p. 84-85; Cortés, *Cartas y documentos*, p. 113-127; "Demanda de Ceballos en nombre de Pánfilo de Narváez contra Hernando Cortés y sus compañeros." In Joaquín García Icazbalceta, *Colección de documentos para la historia de México*,

On his departure from Tenochtitlan, Cortés placed Pedro de Alvarado in charge of the 80 Spaniards left behind. During Cortés's absence, Alvarado claimed the Aztecs were plotting an attack against the Spaniards so during the festival of Toxcatl in the main ceremonial courtyard, Alvarado blocked all four entrances then, fully armed, the Spaniards entered and began slaughtered the unarmed Aztecs, estimated some decades later at 8000 to 10000 dead.¹⁴ Word of the massacre spread throughout the city and the Aztecs rose and drove the Spaniards back into their quarters. Secure in the palace of King Axayacatl (ruled 1468-1481) which they had fortified, the Spaniards remained besieged inside.¹⁵

When Cortés received this news on the coast in late May, he returned with a Spanish force which numbered around 1300 with the addition of Narváez's men, plus another 2000 warriors he gathered at Tlaxcallan, and entered Tenochtitlan unopposed on 24 June 1520.¹⁶ Once back in his fortified quarters, Cortés was trapped. After repeated unsuccessful forays, and with most of his gunpowder and virtually all his food depleted, Cortés and his men fled the city at midnight on 30 June/1 July under cover of a thunderstorm, leaving behind the murdered bodies of Moteuczoma and 40 other kings and nobles of the surrounding cities.¹⁷

2 v., Mexico City, Porrúa, 1971, v. 1, p. 437-444; Díaz del Castillo, *Historia verdadera*, v. 1, p. 333-379; López de Gómara, *Historia general*, v. 2, p. 181-192; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 129-131; Muñoz Camargo, *Historia de Tlaxcala*, p. 216; Oviedo y Valdés, *Historia general*, v. 4, p. 52-60; Tapia, "Relación," p. 76-52.

14 Durán, *Historia*, v. 1, p. 21-22, v. 2, p. 548; Aguilar, *Relación breve*, p. 85; Díaz del Castillo, *Historia verdadera*, v. 1, p. 346; Ixtlilxochitl, *Obras completas*, v. 2, p. 227; Bernardino de Sahagún, *Florentine Codex: General History of the Things of New Spain. Book 2--The Ceremonies*, Salt Lake City, University of Utah Press, 1981, p. 66-77; Tapia, "Relación," p. 75-76.

15 Acosta, *Obras*, p. 241; Chimalpahin, *Relaciones originales*, p. 121; *Códice Aubin*, Mexico City, Innovación, 1980, p. 85; Díaz del Castillo, *Historia verdadera*, v. 1, p. 379; Durán, *Historia*, v. 1, p. 21-22, v. 2, p. 548; Ixtlilxochitl, *Obras completas*, v. 1, p. 453-454, v. 2, p. 228; López de Gómara, *Historia general*, v. 2, p. 194-195; Muñoz Camargo, *Historia de Tlaxcala*, p. 216; Sahagún, *Florentine Codex, Book 12*, p. 51-57; Sahagún, *1585 Revision*, p. 74-78.

16 Cortés, *Cartas y documentos*, p. 90-91; Díaz del Castillo, *Historia verdadera*, v. 1, p. 379-381; Ixtlilxochitl, *Obras completas*, v. 2, p. 229; López de Gómara, *Historia general*, v. 2, p. 193; Oviedo y Valdés, *Historia general*, v. 4, p. 60.

17 Acosta, *Obras*, p. 242; Aguilar, *Relación breve*, p. 88-97; Chimalpahin, *Relaciones originales*, p. 121-122, 236; Cortés, *Cartas y documentos*, p. 91, 98-100; Díaz del Castillo,

Intercepted at the eastern edge of the city, over 860 Spaniards were lost, but Cortés escaped with fewer than 500 others. During their escape and desperate retreat, the Spaniards lost all of their cannons and most of their other arms, but survived days of battle en route, though everyone was wounded, and finally reached Tlaxcallan on 11 July, where their alliance was reaffirmed.¹⁸

The Spaniards recuperated at Tlaxcallan for three weeks then launched an attack on nearby Tepeyacac, followed by others on surrounding towns.¹⁹ Tenochtitlan was in turmoil following the deaths of Moteuczoma and other rulers and nobles, but Cuitlahua was chosen to succeed the king.²⁰ The timing was unfortunate for Cuitlahua, as the people were occupied in their fields and he had no opportunity to reassert Aztec power in a war. Even more telling, in mid October, smallpox brought by Narváez swept through the Valley of Mexico, killing approximately 40 per cent of the population there and throughout central Mexico within a year. Among its victims was Cuitlahua who died in early December.²¹ Cuauhtemoc was then chosen as his successor, but faced with the imminent return of the Spaniards, he was likewise unable to reassert control over his tributaries.²²

Historia verdadera, v. 1, p. 384-385, 393-398; López de Gómara, *Historia general*, v. 2, p. 197, 203-207; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 132, 141; Muñoz Camargo, *Historia de Tlaxcala*, p. 218-220; "Descripción," v. 4, p. 253; Oviedo y Valdés, *Historia general*, v. 4, p. 64-65, 68; Sahagún, *Florentine Codex*, Book 12, p. 59.

18 Aguilar, *Relación breve*, p. 92; Chimalpahin, *Relaciones originales*, p. 236; Cortés, *Cartas y documentos*, p. 100-101; Díaz del Castillo, *Historia verdadera*, v. 1, p. 400-407; Martyr d'Anghera, *De Orbe Novo*, v. 4, p. 144-145; Oviedo y Valdés, *Historia general*, v. 4, p. 71; Sahagún, *Florentine Codex*, Book 12, p. 96-97.

19 Cortés, *Cartas y documentos*, p. 104; Díaz del Castillo, *Historia verdadera*, v. 1, p. 412-414; Oviedo y Valdés, *Historia general*, v. 4, p. 75.

20 Alvarado Tezozómoc, *Crónica mexicáyotl*, p. 159; Chimalpahin, *Relaciones originales*, p. 236; Díaz del Castillo, *Historia verdadera*, v. 1, p. 391; Ixtlilxochitl, *Obras completas*, v. 2, p. 230.

21 Aguilar, *Relación breve*, p. 96-97; Alvarado Tezozómoc, *Crónica mexicáyotl*, p. 160; *Códice Aubin*, p. 86; Díaz del Castillo, *Historia verdadera*, v. 1, p. 378, 414; Ixtlilxochitl, *Obras completas*, v. 1, p. 454, v. 2, p. 236; López de Gómara, *Historia general*, v. 2, p. 191-92; Sahagún, *Florentine Codex*, Book 12, p. 83; Sahagún, *1585 Revision*, p. 102.

22 Alvarado Tezozómoc, *Crónica mexicáyotl*, p. 163; Chimalpahin, *Relaciones originales*, p. 236; *Códice Aubin*, p. 86; Díaz del Castillo, *Historia verdadera*, v. 1, p. 414-415; Ixtlilxochitl, *Obras completas*, v. 1, p. 454, v. 2, p. 236; López de Gómara, *Historia ge-*

Cortés and his allies began their return to the Valley of Mexico on 28 December.²³ Among his allies was Ixtlilxochitl, a contender for the throne of Tetzaco, second city of the Aztec empire, so when this party reached that city on the eastern shore of the lake, they were welcomed by its king, Coanacoch, who then fled with his followers to Tenochtitlan. His flight left the Spaniards with a secure base in the Valley of Mexico from which they launched a number of forays.²⁴

Three major campaigns were launched from mid January to mid April. The first ended in defeat when the Spaniards attacked the city of Ixtlapalapan at the western end of the Ixtapalapa Peninsula. Built out into the lake, when the Spaniards entered, the defenders broke the dikes and flooded the city. The Spaniards then fled back along the peninsula under constant assault from Aztec canoes.²⁵

The second and third campaigns focused on cutting Tenochtitlan off from external assistance. The second swung north around the lakes, conquering cities en route, until the Spaniards reached Tlacopan where the Aztecs attacked them in force and the Spaniards retreated to Tetzaco.²⁶ The third went south, outside the valley, conquering allied cities, then reemerging in the Valley at Xochimilco where they were once again beaten and forced back to Tetzaco.²⁷

neral, v. 2, p. 223; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 149; Sahagún, *1585 Revision*, p. 102-103.

23 Cortés, *Cartas y documentos*, p. 118-119; Díaz del Castillo, *Historia verdadera*, v. 1, p. 436-437; Ixtlilxochitl, *Obras completas*, v. 1, p. 454-455; López de Gómara, *Historia general*, v. 2, p. 223-224.

24 Aguilar, *Relación breve*, p. 95; Alvarado Tezozómoc, *Crónica mexicáyotl*, p. 149; Cortés, *Cartas y documentos*, p. 123; Díaz del Castillo, *Historia verdadera*, v. 1, p. 440-441; Ixtlilxochitl, *Obras completas*, v. 1, p. 455-457, v. 2, p. 241-242; López de Gómara, *Historia general*, v. 2, p. 229; Oviedo y Valdés, *Historia general*, v. 4, p. 89.

25 Cortés, *Cartas y documentos*, p. 125-26; Díaz del Castillo, *Historia verdadera*, v. 1, p. 442-444; Ixtlilxochitl, *Obras completas*, v. 1, p. 456, v. 2, p. 246; López de Gómara, *Historia general*, v. 2, p. 230; Oviedo y Valdés, *Historia general*, v. 4, p. 90-91.

26 Cortés, *Cartas y documentos*, p. 134-136; Díaz del Castillo, *Historia verdadera*, v. 1, p. 455-460; Ixtlilxochitl, *Obras completas*, v. 1, p. 457-458, v. 2, p. 247; López de Gómara, *Historia general*, v. 2, p. 234-235; Oviedo y Valdés, *Historia general*, v. 4, p. 98; Sahagún, *Florentine Codex, Book 12*, p. 81.

27 Cortés, *Cartas y documentos*, p. 138-140, 142-143; Díaz del Castillo, *Historia verdadera*, v. 1, p. 471-487; Ixtlilxochitl, *Obras completas*, v. 1, p. 459-460, v. 2, p. 252; López de Gómara, *Historia general*, v. 2, p. 238-242.

In anticipation of the attack on Tenochtitlan, Cortés had built 13 brigantines near Tetzcoco, each 42 feet long with a 48-foot flagship, half with one sail and half with two, 12 oarsmen per ship, plus armed soldiers and a falconet.²⁸ These ships were launched on 28 April, but the actual assault of Tenochtitlan did not begin until 22 May when he divided his forces into three armies under Pedro de Alvarado, Cristóbal de Olid, and Gonzalo de Sandoval. Each commanded about 200 Spaniards and 20 000 to 25 000 Indian allies and marched respectively to the base of the causeways at Tlacopan, Coyoacan, and Ixtlapalapan.²⁹ Despite their utter dependence on their enormous allied Indian assistance, the Spaniards charged one leader, Xicotencatl of Tlaxcallan, with desertion and hanged him.³⁰

The three armies attacked along the causeways where they were met by Aztec forces and assaulted on both sides from canoes. It was against the latter threat that the brigantines were built but were only effective in keeping them away from the side of the causeways the larger ships could approach. Beaches there therefore dug in the causeways to allow the ships to pass through so they could guard the flanks of the attackers on both sides, and also interdicted supply canoes bringing food and water into the city.

The battles seesawed back and forth, but by late of July, the Spaniards entered Tenochtitlan. Then, on 13 August, Cuauhtemoc and other nobles were captured by one of Cortés's brigantines as they fled the city in a canoe.³¹

28 Aguilar, *Relación breve*, p. 95; Cortés, *Cartas y documentos*, p. 149; Díaz del Castillo, *Historia verdadera*, v. 1, p. 497; C. Harvey Gardiner, *Naval Power in the Conquest of Mexico*, Austin, University of Texas Press, 1959, p. 25-26, 130-132; Ixtlilxochitl, *Obras completas*, v. 1, p. 461; López de Gómara, *Historia general*, v. 2, p. 244; Martyr d'Anghera, *De Orbe Novo*, v. 2, p. 173; Sahagún, *1585 Revision*, p. 104.

29 Aguilar, *Relación breve*, p. 95; Cortés, *Cartas y documentos*, p. 150; Díaz del Castillo, *Historia verdadera*, v. 2, p. 9-10; Durán, *Historia*, v. 2, p. 563; Ixtlilxochitl, *Obras completas*, v. 1, p. 462, v. 2, p. 256; López de Gómara, *Historia general*, v. 2, p. 246; Oviedo y Valdés, *Historia general*, v. 4, p. 115.

30 Aguilar, *Relación breve*, p. 93-94; Muñoz Camargo, *Historia de Tlaxcala*, p. 233; "Descripción," v. 4, p. 170, 259; Sahagún, *1585 Revision*, p. 101.

31 Acosta, *Obras*, p. 242; Cortés, *Cartas y documentos*, p. 185-189; Díaz del Castillo, *Historia verdadera*, v. 2, p. 58-59; Ixtlilxochitl, *Obras completas*, v. 1, p. 477-478; Sahagún, *Florentine Codex*, Book 12, p. 117.

TIMING

Although many of the major events of the Conquest were recorded with the dates they occurred, the specific timing of the various events has spurred little interest, and the sequence of these events is generally accepted as a given. Yet some greater significance of these dates may be gleaned from other underlying, and little considered, factors influencing their sequence.

While dates per se may not have been overly important, their relative timing is, although its role has been underappreciated. The timing of some events during the Conquest was the result of external factors beyond the control of the primary actors, such as Narváez's arrival. But others were within the control of the participants, such as Cortés's decision to march inland in August 1519, to march to Tenochtitlan in November 1519, and to return there in late December 1520 Cortés initiated all of these actions when he did, but could have easily chosen other times. But some light may be shed on his decisions by re-examining the Conquest in light of various temporal patterns which promise to explain why many of its pivotal events occurred when they did.

Briefly, the pivotal military events of the Conquest were:

| | | |
|------|----------------|---------------------------------------|
| 1518 | 21 April | Cortés reaches Veracruz coasts |
| | 16 August | Cortés begins march inland |
| | 2 September | Battles with Tlaxcallan begin |
| | mid October | Cholollan massacre |
| | 8 November | Cortés enters Tenochtitlan |
| 1520 | late April | Toxcatl massacre |
| | 28 May | Cortés defeats Narváez |
| | 30 June/1 July | Cortés flees Tenochtitlan |
| | 1 August | Cortés attacks Tepeyacac |
| | 28 December | Cortés begins return to Tenochtitlan |
| 1521 | January-April | Campaigns around the Valley of Mexico |
| | 28 April | Brigantines launched |
| | 22 May | Assault of the causeways begins |
| | Late July | Spaniards enter Tenochtitlan |
| | 13 August | Cuauhtemoc surrenders |

These dates do reflect the sequence of the Conquest. But viewing them in relation to other temporal patterns is instructive.

THE WAR SEASON

One factor affecting the timing during the Conquest was the annual ecological pattern that produces seasons. Seasons play a crucial role in many military campaigns, perhaps most famously in the onset of winter in Russia during the ill-equipped invasions of Napoleon Bonaparte in the nineteenth century, and of Adolf Hitler in the twentieth. Although central Mexico does not experience the weather extremes of the Russian steppes, climate nevertheless played a crucial role there as well and may be expected to have influenced the timing of the Conquest.

In Mesoamerica, the primary temporal pattern influencing military campaigns was the result of the rainy season which, in central Mexico, begins as early as late May, though more usually in June, and stretches into October. During that period, the vast bulk of the annual rain falls in the Valley of Mexico. The Valley itself is, in fact, a basin of some 7 800 square kilometers, so all the rainfall within it either evaporates or eventually flows into the lakes that cover its lowest elevation.³²

This rainy season patterned many Mesoamerican social behaviors, notably the agricultural season which depended on these annual rains. Fields were cleared and prepared in anticipation of the rains, then planted and tended during them. As an agrarian society, the Aztecs, like the other cultures of central Mexico, were heavily dependent on their fields, and the great majority of the populace was involved in agricultural pursuits. But in the highlands where the Valley of Mexico was located (its lowest land elevation was lake-level, at 2 240 meters), most agriculture ended with the Autumn harvests.

32 Anton Kovar, "The Physical and Biological Environment of the Basin of Mexico," In William T. Sanders *et al.*, *The Natural Environment, Contemporary Occupation and 16th Century Population of the Valley--The Teotihuacan Valley Project: Final Report*, University Park, Pennsylvania State University, 1970 (Occasional Papers in Anthropology, 3), p. 15.

The agricultural season, in turn, limited and defined the Mexican war season, which began in early December, after the harvests were completed, and continued into early April, when agriculture once again demanded attention. In part, the timing of the war season was due to the importance of not interrupting the economically crucial farm work, as only after harvest were large numbers of men available for major military campaigns. Moreover, only after harvest was a large food surplus available to support armies, and only then, long after the rains and their runoff had ended were the dirt roads again passable for large bodies of men, and the streams and rivers low and fordable. Small forces could be marshaled for defensive or even offensive actions in other times, but truly large armies required drawing on commoners, who owed military duty as part of their tributary obligations, and they could not be drawn away from their agricultural pursuits in large numbers without significantly damaging the domestic economy.

SEASONALITY IN THE CONQUEST

Cortés had been fortunate in initially arriving on the Gulf coast after the war season which likely contributed to the muted response his arrival prompted. Political considerations were important, perhaps even pivotal, but the fact that the Aztecs were not in a position to send large forces all the way to the Gulf coast at that time of year contributed. Then, when Cortés marched inland, the timing benefitted him against the Tlaxcaltecs as well. Although the Tlaxcaltecs were fighting a defensive war that did not require vast mobilization or distant projection of force that would have been hobbled by the season, their available forces were nevertheless relatively small because their clashes with the Spaniards began in early September. Cholollan too was militarily constrained by the season when the Spaniards massacred their leadership. And Cortés's initial entry into Tenochtitlan without opposition on 8 November 1519 was similarly aided by his timing. As there were more than enough elite warriors available even during the agricultural season to repulse Cortés's forces, the decision to admit them was at least partially political. Indeed, his journey to Tenochtitlan during the agricultural season may also explain why only a few thousand Tlaxcaltecs were available to

accompany him. Thereafter, through the next war season, Cortés remained in Tenochtitlan, only going to the coast after it ended.

Cortés engaged in no large-scale military acts during the war season of 1519-20 when he could have been vigorously confronted and likely defeated. And while Narváez's arrival was unforeseeable, the time of year at least partially accounted for Cortés having marched against him with 266 Spaniards but no Indian support. The post-war season, however, also meant that Narváez had little prospect of recruiting Indian allies then. But in Cortés's absence, it is also likely not accidental that the Toxcatl massacre took place after the war season when the men of Tenochtitlan were no longer armed and assembled.

Thus far in the Conquest, Cortés had benefitted by recognizing the significance of the indigenous war season, and only acting militarily when his opponents were least prepared to resist him and avoiding action when they were. Every time he struck to that point had been before or after the war season, when his opponents were dispersed in agricultural pursuits and least ready to confront him. But as his return to the capital in June 1520 demonstrated, in a local action even during the agricultural season, enough Aztecs could be mustered to force his flight from the city.

Despite having barely escaped Tenochtitlan with his life and about 40 per cent of his men, after recuperating Cortés again took advantage of the agricultural season to attack Aztec allies near Tlaxcallan. The Aztecs failed to respond in a significant way because of the political turmoil in Tenochtitlan following the death of Moteuczoma, the Valley-wide disruption resulting from the killing of many other Valley kings and nobles, and the outbreak of smallpox in the Valley of Mexico in October. Once again, the timing hindered a major Aztec response at that distance, leaving the Spaniards free to attack when their opponents were weakest.

Although the Mesoamerican war season explains much about the timing of Cortés's actions and inaction, especially through the Summer of 1520, thereafter, the fit is not precise, suggesting other factors were involved in the timing. For example, when Cortés returned to the Valley of Mexico, he clearly intended to conquer Tenochtitlan, yet he began his march back to the Valley on 28 December 1520, less than a month after the start of the war season when the Aztecs could be expected to be most

ready to oppose him. This return was an aggressive move for the already defeated Spaniards, but it begs the question of why Cortés not launch his attack while the Aztecs were still unprepared, in early Autumn, as had been his practice previously?

The reasons, I suggest, are two-fold. First, when he operated with large allied forces, Cortés had to conform to the traditional Mesoamerican war season as only then were such armies available. This factor meant Cortés could not begin his return to the Valley of Mexico until after the start of the war season. And second, it is likely that Cortés was not in charge; when large forces were engaged, the Indian leaders were in command, since even in the final siege of Tenochtitlan, the Spaniards contributed no more than one per cent of the forces arrayed against the Aztecs.

In fact, Cortés did not begin his return march to the Valley until 28 December 1520, arriving in early January 1521. But why did he wait so long into the war season to return? Early December marked the beginning of the war season, yet delaying the return until the end of December would limit how long Cortés and his allies could remain in the field. Similarly, why did he wait until 28 April to launch his brigantines and until 22 May to initiate his assault on Tenochtitlan proper?

Some of Cortés's actions in 1521 might be partly explained by his earlier strategy of avoiding conflict until after the end of the Mesoamerican war season. The sole exception to this strategy was Cortés's 1521 campaigns in and around the Valley of Mexico. These battles were not, however, the main assault on Tenochtitlan, which he avoided until after the war season. In the three major assaults he orchestrated that actually took place during the war season of 1521, the Spaniards were only successful while traversing more thinly populated areas; along the sparsely populated Ixtapalapa peninsula, to the north which was the least populous areas in the Valley, and to the south outside the Valley skirting the densely populated southern cities. In all three cases, when they reached their respective target cities of Ixtlapalapan, Tlacopan, and Xochimilco, they were defeated and fled back to Tetzaco.

The assault on Tenochtitlan itself was delayed until the war season ended. But why would his Indian allies have agreed to remain in the field at that time of year, before the main assault on Tenochtitlan had begun and

when its duration and outcome were both in doubt? A partial explanation emerges from another temporal pattern.

LAKE SEASONS

Tenochtitlan was built on an island toward the western side of a vast lake system in the Valley of Mexico conventionally divided into five lakes. From north to south, they are Zumpango, Xaltocan, Texcoco, Xochimilco, and Chalco, and are fed primarily from runoff from the surrounding mountains as well as springs and two rivers feeding into the southernmost lake.³³ Combined, the lakes had a surface area of 1 000 square kilometers but were relatively shallow, varying between one and four meters deep.³⁴

The Valley was actually a basin with no external drainage, so all the water that fell within it ultimately made its way to these interconnected lakes. After the rains, the lakes reached a normal high of 2 240 meters during the runoff, then gradually declined, typically dropping over two meters before the next Summer's rains. As a result, the entire lake system was navigable at its height but toward the following spring, the passages from the northern two lakes fell enough to hinder boat traffic to the southern lakes, if not sever it entirely. The southern two lakes, fed by springs and rivers year-round, remained open, but the other lakes fell to lows that also hindered boat traffic until the water level again rose with the summer rains.³⁵

The lake cycle and rainy seasons complicated the attack on Tenochtitlan. Land warfare was easiest after the agricultural season but naval warfare was easiest when the lakes were highest, which was primarily during the agricultural season, during the rainy season and following. Why, then, did Cortés

33 Roberto Moreno, *Joaquín Velázquez de León y sus trabajos científicos sobre el Valle de México*, Mexico City, Universidad Nacional Autónoma de México, 1977, p. 275-277; Angel Palerm, *Obras hidráulicas prehispánicas en el sistema lacustre del Valle de México*, Mexico City, Instituto Nacional de Antropología e Historia, 1973, p. 235.

34 Richard Edward Blanton, *Prehispanic Settlement Patterns of the Ixtapalapa Peninsula Region, Mexico*, University Park, Pennsylvania State University, 1972 (Occasional Papers in Anthropology, 6), p. 23; Palerm, *Obras hidráulicas*, p. 17, 230-234.

35 Ross Hassig, *Trade, Tribute, and Transportation: The Sixteenth-Century Political Economy of the Valley of Mexico*, Norman, University of Oklahoma Press, 1985, p. 137-142.

choose to strike at Tenochtitlan when he did? The rains had either just begun or were likely to begin soon, the agricultural season was already underway, both of which would have been major obstacles to the land assault and would have strained his alliances, demanding as they did that men needed to cultivate the fields remain at war. At the same time, the lake levels were at their absolute lowest of the year, which would have been a major obstacle to naval operations, especially for the Spanish brigantines, which had significantly deeper draughts than Indian dugout canoes.

The timing of the siege of Tenochtitlan would appear to have been the absolute worst possible, but may be partially explicable by all that went before. Cortés was not able to reenter the Valley of Mexico until the war season was already underway, which then deferred other important preliminary operations in and around the Valley. Moreover, it took time to build his ships.

Whenever Cortés first decided on the idea of building ships for use in the Valley of Mexico, it could only have been implemented after his flight from Tenochtitlan and reception in Tlaxcallan. In fact, preparations most likely began only after the agricultural season when large numbers of laborers became available. So the timing of the naval assault was dependent on how long it took to cut and fashion the necessary timbers for the ships. These were then carried from Tlaxcallan to the Valley of Mexico, and further time was required to assemble them into brigantines, equip them, and dig a massive canal to float them to Lake Texcoco from the construction site, which was well away from the lake to avoid Aztec canoe-borne attacks. But with the rainy season beginning, why did Cortés not delay initiating his attack? After all, any delay would only aid Cortés in his attempt to starve out the Aztecs and would allow the lake levels to increase so his brigantines would be effective over more of the lake.

CORRECTING THE DATES

It might seem that Cortés launched his brigantines too early. But this, and perhaps other issues, can be further illuminated by considering when the events occurred, as there was a fundamental error in the dates as recorded.

In the early sixteenth century, Europeans used the Julian calendar, so the dates given here, taken from the conquistador accounts, appear normal enough. But the Julian calendar intercalates one day every four years to compensate for the fact that the solar year is slightly longer than 365 days. Adding an extra day every four years adjusts the calendar to account for a solar year of 365.25 days, which is roughly accurate and adequate for short terms. But the solar year is actually 365.2422 days long. Therefore, adding one day every four years was a slight overcompensation, which is not significant in the short term, produces a significant error over centuries. This was particularly important to the Roman Catholic Church, since its main religious festival, Easter, was keyed to astronomical events, and a series of other festivals were, in turn, keyed to the timing of Easter. As the errors in the calendrical system slowly accumulated, the day Easter was celebrated and astronomical reality gradually diverged. Finally, in 1582, Pope Gregory mandated a calendrical correction, the Gregorian calendar, which eliminated leap days in centurial years (e. g., 1700, 1800, 1900) which had previously had them except for those that were multiples of 400 (e. g., 1600, 2000). This better corrected future calendrical calculations, but to bring the calendar in use in the sixteenth century into line with astronomical reality, a change was instituted by which ten days were skipped in the calendar. Thus, the day that began after midnight of Thursday, October 4, 1582 (Julian), became Friday, October 15, 1582 (Gregorian).³⁶

REDATING EVENTS

This simple shift forward by ten days is potentially enough to eliminate some of the difficulties in explaining Cortés's actions. The primary case is the launching of the Brigantines.

Since the conquistadors were using the Julian calendar to record events during the Conquest of 1519-1521, a recorded date of, say 1 May, would actually be 11 May in the Gregorian system, which better reflects ecological

36 Gordon Moyer, "The Gregorian Calendar", *Scientific American*, 1982, v. 246, n. 5, p. 144-152.

reality. Thus, when Cortés sent his armies to begin the assault on Tenochtitlan on 22 May, which would likely be prior to the start of the rainy season if that had been the Gregorian date, but the actual date would have been about 2 June, which was either closer to the start of the rainy season or already in it. Thus, throughout the Conquest, the recorded dates hitherto used were roughly 10 days earlier in terms of the seasons than taking them at face value would indicate. While such a correction helps explain some events, such as the launching of the brigantines, it makes others even more problematic. The primary example is Cortés' return to the Valley of Mexico. Although the start of this return from Tlaxcallan is recorded as 28 December 1520, adjusting to the ten-day temporal displacement, that date would actually be 7 January 1521. This correction, however, pushes the beginning of the Spanish assault in the Valley of Mexico even further into the war season, potentially limiting the time his allied forces would be available to fight.

The calendrical correction, moreover, does little to explain why Cortés would push the ground assault on Tenochtitlan so far into the Summer. His allies would not have been eager to do so, and the fact that it was pushed that far beyond their traditional war season may account for Xicotencatl's departure and his subsequent murder by Cortés's order. It is far less likely that he was deserting than merely returning to Tlaxcallan after the end of the war season in anticipation of the start of the agricultural season. But his actions served as a useful excuse for Cortés to eliminate a less than enthusiastic ally and simultaneously warn others who might be considering returning home.

Despite the problems of continuing the campaign into the agricultural season, there were also advantages to fighting in the Summer, if it could be sustained. Although Cortés would necessarily draw off many allied men normally employed in the fields at this time, his access to foodstuffs was not interrupted as allied lands were behind their lines whereas the Aztecs were cut off from most of theirs. And if the Aztecs had any hope of receiving military support from tributary cities, they would not during the agricultural season.

Nevertheless, Cortés's main liability was that he was attempting to maintain an offensive allied coalition in the field with all the logistical problems that entailed whereas the Aztecs fought defensively with few such obstacles. Why, then, would Cortés have fought on such a seemingly unequal basis?

THE SPANISH EDGE

The Indians who allied with Cortés did not do so because he was decisively dominant militarily. He was not, and the Tlaxcaltecs could have killed his entire force by continuing the battle when they first clashed, but decided to ally with him instead because they recognized a crucial value in the Spaniards.

The Tlaxcaltecs were engaged in a long-term struggle against the Aztecs which they were losing. But as both sides deployed similarly armed and trained forces, it was difficult for either to break through the lines of the other in battle. If either side could, it would then be a relatively simple matter for their forces to pour through, turn their enemy's flanks, and scatter, if not defeat, them outright. What the Tlaxcaltecs recognized from their clash with the Spaniards was that Spanish arms—notably their arquebuses, falconets, and crossbows—could strike at a greater distance than Indian arms, and do so with enough penetration to disrupt their lines. This advantage had not been exploited by the Spaniards because, while they were able to disrupt the attacking Tlaxcaltec formations, they could not exploit these breaches because they were too few to risk counterattacking. It was the Tlaxcaltecs who realized that as allies, they could use the few Spaniards to penetrate Aztec lines, then exploit these breaches with their own large forces. So the primary advantage the Spaniards offered was this ability to penetrate opposing arms, and at least by the time they returned to the Valley of Mexico, the Spaniards were well aware that this was their primary asset. But, as unlikely as it may seem, this ability was affected by yet another temporal pattern.

THE HURRICANE SEASON

Throughout the latter half of the Conquest, much of Cortés's timing when he relied on large allied forces depended on the hurricane season. The fact of hurricanes was, of course, well known to Indians and Spaniards alike, but their significance for these two groups differed considerably.

In the Gulf of Mexico and north Atlantic, the hurricane season runs from 1 June through 30 November, although the specific start and end varies,

and the number, severity, and landfall of the hurricanes is unpredictable. Wind gods were common in Mesoamerica, especially among coastal groups which bore the brunt of these devastating storms, and the people were fully aware that these storms came in the Summer and Autumn. But these seasons had a significance for Cortés that they did not for the natives.

Hurricanes in the Gulf of Mexico and Caribbean could be devastating, rendering shipping in the Spanish sailing vessels of the day extremely risky, virtually shutting it down for the duration of the season. Cortés's allies were almost certainly unaware of this, as they lacked significant seagoing experience, having no sails, so they were largely restricted to rafting and canoeing in coastal waters.

Cortés, by contrast, knew that Spanish ships were unlikely to risk hurricanes. Throughout the Conquest, Cortés received additional men and materiel from ships that arrived along the coast. At first intermittent, as word of the Spanish expedition spread throughout the West Indies, more ships and men arrived. But Cortés could not expect to receive any further Spanish supplies of men or materiel from July through November, and probably somewhat longer since the risk of hurricanes had to be assessed not simply for the arrival on the Mexican coast, but for the time of their sailing. In fact, throughout the sixteenth century, Spanish shipping in the Gulf and Caribbean was largely restricted to late Winter through early Summer. In the early colonial period, convoys from Spain took two to three months, arrived at Veracruz from May into July, and departed in May, benefitting from the seasonal winds but skirting the hurricane season.³⁷ In consequence, Cortés was acutely aware that he could expect no resupply from mid Summer through Autumn. But his Indian allies were unaware of this.

REASSESSING THE TIMING OF THE CONQUEST

What difference did this make to the Conquest? The Mesoamerican war season does not adequately explain the timing of Cortés's late start in returning to the Valley of Mexico on 28 December (Julian), but the hurricane

37 Hassig, *Trade, Tribute, and Transportation*, p. 161-171.

season does. His Tlaxcaltec allies would have been ready for a month (Gregorian) when Cortés finally began his return march, since their war season had begun in early December. But Cortés had a severely depleted force; he had lost all his artillery and most of his powder and crossbows during his flight from Tenochtitlan. Yet this was the force and equipment he had in early December, but it would have been inadequate for a return to the Valley. The delay of a further month, however, allowed time for ships to reach the Veracruz coast after the end of the hurricane season and for at least some additional men and materiel to reach Tlaxcallan. And though these arrivals are poorly recorded in the conquistador accounts, by the time Cortés began his siege of Tenochtitlan the following Spring, his Spanish forces had more than doubled and his powder and arms were fully replenished. For Cortés, the war season based on the hurricane season plus the time required to ship men and materiel to the Valley of Mexico, which was approximately early January to July plus however long his supplies could be stretched.

By April 1521, when the Mesoamerican war season again ended and the various Indian groups traditionally returned home to tend their fields, Cortés had not yet begun his major assault on Tenochtitlan, and halting the campaign now would give the Aztecs time to re-arm, consolidate their hold on wavering tributaries, and likely kill and replace disloyal local leaders. All of this would have been as apparent to the Indians as to the Spaniards, but the cost of pursuing the campaign into the rainy season fell almost entirely on the Indian allies. In assessing the value of continuing the attack despite the economic hardships, the Indians could weigh a series of factors. They likely recognized that the Spanish brigantines in the lakes would gain in value as the rainy season continued to fill the lakes, allowing these deeper draught vessels to sail throughout more of their expanse. And even more crucial, Spanish firearms gave the attacking armies the penetrating power needed to break through Aztec lines, which the native arms could not readily achieve. In fact, the great advantage of the brigantines came from the same source, as each mounted a cannon and carried harquebusiers and crossbowmen.

What the Indian allies did not realize, however, was that the assault depended on an influx of more gunpowder and more arms to replace what was expended in combat. That flow of armaments came overland from Spanish ships on the coast and was a serious time constraint for Cortés. Through

a combination of promises, enticements, and threats, Cortés maintained a tenuous hold on his allies and induce them to continue the campaign. The Indians had their own reasons for wishing to overthrow the Aztecs, and the Spaniards gave them the advantage they needed to do so. Thus, their continuation of the siege of Tenochtitlan rested on their belief that Cortés and his men had the firearms needed to punch through opposing lines so that the Indian armies could then carry the battle.

What they did not realize was that the hurricane season would soon interrupt and then totally sever the vital shipping link from Spain and the West Indies to the Mexican gulf coast. But Cortés did. If the campaign were stopped in April, it could not recommence until his supplies were resumed, probably no sooner than the following January, as the trek from the Gulf to the Valley of Mexico required almost three weeks. So Cortés pushed for a continuation of the campaign without alerting his allies to the risk they ran of running out of the supplies that were crucial to their success.

And the risk was substantial. Once the Spaniards and their allies crossed the causeways and reached Tenochtitlan itself, their gunpowder was so low that Cortés was desperate for an alternative way of penetrating Aztec lines. The allies were apparently unaware of this shortage, yet it was so acute that Cortés authorized the construction of a catapult, based on the assurance of one of his men who claimed to have fought in Italy and said he knew how they were built. The device was built, but proved ineffectual, lofting stones no higher than the catapult itself, and was abandoned. Fortunately for Cortés, the campaign was near enough to the end that he and his allies were able to conclude it without being unduly hindered by their dwindling gunpowder supplies.

CONCLUSIONS

The conquest of Mexico as presented is typically the story of a straightforward attack and eventual victory by the forces allied with Cortés. That perspective has much to offer, but is inherently incomplete. Timing was a crucial factor in the Conquest, and not the happenstance of events.

Cortés acted in relation to a series of temporal cycles that influenced combat in Mesoamerica, astutely avoiding pitched battle during the tradi-

tional war season when he was unlikely to prevail, and instead fighting primarily when the Aztecs were least prepared for war. He was also influenced, however, by the hitherto relatively unimportant temporal pattern of the annual lake fluctuations, as only when they deepened could he effectively employ brigantines, a novel weapon in Mesoamerica, and without them, he had little hope of cutting off Tenochtitlan from resupply or hindering their ability to launch offensive canoe attacks on the Spanish rear. But what primarily affected the timing of the campaign was the temporal dimension of the hurricane season, the implications of which were unrecognized by the Indians, but of acute concern to Cortés. This pattern likely accounts for Cortés's month-long delay in returning to the Valley of Mexico in late December (early January Gregorian). The Tlaxcaltecs would have been ready nearly four weeks earlier, so the delay is attributable to Cortés waiting for reinforcements and resupply from the coast, which he had before his return, and that, in turn, would have arrived after the end of the hurricane season. Conversely, the extension of the assault on Tenochtitlan into the Summer was Cortés's calculation that he could win before his supplies were exhausted, as they could not be replenished once the next hurricane season began.

Cortés took a risk, and did so on behalf of his men and hundreds of thousands of his allies, and he apparently did so without informing them. Had the battle worn on for even a few weeks longer, the tide would almost certainly have turned. Even at the end, inside their capital, Aztec armies were still defeating the allied Indian armies. To prevent this, Spaniards with firearms were dressed in native garb and concealed among the Indian soldiers, to entice the Aztecs to attack, and once they were committed, Spanish firepower would disrupt their formations, allowing the allied forces to attack, pour through these breaches, and defeat them.³⁸ Without the disruptive power of gunpowder arms that allowed the allied forces to prevail, Aztec armies remained superior.

The conquest of Mexico is thus not merely a story of daring martial skill and luck. It is also the story of a war constrained and assisted by various cyclical patterns that put the Conquest in a different light, revealing otherwise obscured Spanish strategies and tactics.

38 Sahagún, *Florentine Codex*, Book 12, p. 114-116.

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