## Explaining outcomes of asymmetric conflicts revisited: The Arauco War

Explicando los resultados de los conflictos asimétricos: La Guerra de Arauco

Rodolfo Disi Pavlic\*

#### Abstract

This article evaluates two theories that seek to explain the outcomes of asymmetric conflicts. It uses evidence from a case study of the Arauco War (1536-1883). The war resulted, unlike most other instances of European colonization, in the victory of the weaker side. The first theory argues that in asymmetrical warfare, opponents choose between direct (conventional) and indirect (guerrilla) approaches; the stronger side is more likely to win same-approach interactions, while the weaker side is more likely to prevail in different-approach interactions. The second theory advances the claim that when armies become mechanized, they gather less intelligence from the ground, and are therefore less likely to solve the information problem - telling combatants apart from noncombatants. The analysis of the Arauco War shows the limitations of the first theory: the stronger side can easily win some different-approach (indirectdirect) interactions, while the weaker can win same-approach (indirect-indirect) ones. The study lends support to the second theory, especially once it is generalized to include cultural differences as factors that exacerbate the identification problem.

Profesor asistente en el Departamento de Sociología y Ciencias Políticas de la Universidad Católica de Temuco. Ph.D. en Gobierno de la Universidad de Texas. Especialización en política comparada y relaciones internacionales. Correo: rdisi@utexas.edu. Recibido: 5 de octubre de 2016. Aceptado: 7 de marzo de 2017.

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#### Resumen

Este artículo evalúa dos teorías que buscan explicar los resultados de conflictos asimétricos. Usa evidencia de un estudio de caso de la Guerra de Arauco (1536-1883). La guerra resultó, a diferencia de la mayoría de las instancias de colonización europea, en la victoria del lado más débil. La primera teoría argumenta que, en las guerras asimétricas, los oponentes eligen entre tipos directos (convencionales) e indirectos (guerrillas) de aproximación; el lado más fuerte tiene más probabilidades de ganar en interacciones del mismo tipo, mientras que es más probable que el más débil prevalezca en interacciones de distinto tipo. La segunda teoría argumenta que cuando los ejércitos se mecanizan, recogen menos inteligencia del entorno y son, por lo tanto, menos capaces de resolver el problema de identificación (distinguir a los combatientes de los no combatientes). El análisis de la Guerra de Arauco demuestra las limitaciones de la primera teoría: el lado más fuerte puede ganar fácilmente algunas interacciones de distinto tipo (indirecto-directo), mientras que el lado más débil puede vencer interacciones del mismo tipo (indirecto-indirecto). El estudio apova a la segunda teoría. especialmente cuando es generalizada, incluyendo diferencias culturales que exacerban el problema de interacción.

**Palabras Clave:** Guerra asimétrica – Guerrillas – Guerra de Arauco – Problema de identificación – Conquista de América.

To declare the truth of the war in Chile, it is convenient to tell the origin of the unhappy death of Governor Martín García de Loyola, because it was the beginning of all subsequent events in that kingdom.

(...) Having his government in the span of five years reduced most of that kingdom to the false peace its natives were accustomed to, for which he was equally content and deceived, it happened that on the way to Angol, accompanied by more than forty captains, he reached a valley called Curabala during the night, where they assembled their tents and released their horses, and went all to sleep, without the distrust they should have had of enemies or even of friends; because our friends are no less suspicious in that land than our sworn enemies; and going through that valley by chance were about one hundred and fifty Indians from the province of Purén, who were on that road to steal from some convoys of supplies that used to go from Concepción to Imperial. They saw the horses grassing, and then found out that the Governor was sleeping there.

(...) The Indians, seeing that they were invited by such timely occasion to such a famous deed (to which they could only aspire because there was no single sentinel on guard duty), and having had a council on whether to charge against those asleep. resolved to do it, and easily scattered throughout the tents. went into them at the same time in a sudden assault, and without much resistance took their lives; and since among the tents the Governor's was the biggest, he met his cruel executioners when they finally entered, and they took his life with a thousand wounds. They found him standing and with his chain mail in his hands because he must have awakened hearing some noise.

(...) From the Governor's death, which happened in December of the year fifteen ninety-eight, a general uprising resulted, which was the beginning of the biggest losses the Spanish have had in Chile; for all the Indians rebelled, and they devastated the cities of Valdivia, Imperial, Villa Rica, Osorno, and Infantes de Angol, and the fierce barbarians committed great amounts of cruelty, ravage and bloodshed like it was never seen in any attack or assault by the angriest

and most offended of enemies of the world: for they did not spare any gender, age, religion or sacred thing (González de Nájera, 1614a)¹.

This was the second time the "Indians" known as Mapuche<sup>2</sup> killed the highest Spanish authority in Chile, and the destruction of the abovementioned cities meant that Spain had lost more than half of its Chilean colony's settlements. The "Disaster of Curalaba" and the "Destruction of the Seven Cities," as the events came to be known, amounted to the near loss of a colony due to indigenous warfare – an unparalleled occurrence in the history of the Spanish colonies in the Americas (Goicovich, 2006; Villalobos, 1995). These events were a watershed in the conflict known as the Arauco War (1536-1883) between Spanish colonizers and Mapuche warriors. Eventually, a frontier was

set up on the Bío-Bío River between the Spanish colony of Chile in the north and the Mapuche-controlled territory in the south. The Mapuche were independent until 1883, when the Chilean and Argentine armies conquered their territory (Navarro, 1909).

Why where the Mapuche able to fend off Spain? There is a general consensus among historians that when the first Spanish explorers arrived in Chile, the Mapuche were a seminomadic hunter-gatherer society<sup>3</sup>. How were the Mapuche successful in resisting conquest when larger, more complex societies like the Incas and Aztecs quickly succumbed?<sup>4</sup> Was it something specific to the Mapuche as a society or military opponent, that made them prevail over a more powerful, better-equipped enemy?

This article argues that the Arauco War can be reasonably understood as an asymmetric war, this is, a war in which one of the sides (Spain) is substantially stronger than the other (the Mapuche). It evaluates two theories from Political Science that seek to explain outcomes in

Alonso González de Nájera, a Spanish soldier who arrived in Chile three years after the events, wrote the above account in 1614. His work was never published during his lifetime but became available when it was edited in Spain in 1866 and in Chile in 1899.

I use this term even though it is somewhat anachronistic. As Boccara argues, the indigenous people called «Araucanians» by the Spanish are nowadays called Mapuche («People of the Land» in Mapundungun, their language) but used to call themselves «Reche» («True People») in Pre- Columbian times. See Boccara (2007).

<sup>&</sup>lt;sup>3</sup> For an opposite yet contested view that argues that the Mapuche were a prosperous sedentary people before the arrival of the Spanish see Bengoa (2008).

<sup>&</sup>lt;sup>4</sup> For a description of the fall of the Incas see for example Rowe (2006), and for an explanation of the fall of the Aztec Empire see Raudzens (1995).

asymmetric warfare in the light of historical and anthropological evidence from the Arauco War. The article divides the war roughly into two periods -the initial one, where the Spanish easily prevailed, and the later one, where the Mapuche triumphed- and uses the method of comparative historical analysis to tease out the factors that affected the outcome of the war in each period<sup>5</sup>. It concludes that the Mapuche prevailed because they were able to change their initial, frontal war tactic to something akin to guerrilla warfare, and that the Spanish could not solve the information problem needed to triumph due to cultural differences between the two factions.

This question does not only concern a specific ethnic group from a distant corner of South America three hundred years ago: answering how the Mapuche prevailed over the Spanish refers to a broader debate on what determines outcomes in asymmetric conflicts. Indeed, analyzing the Arauco War as an asymmetric conflict does only shed light on why the Mapuche won. More importantly, applying theories of asymmetric warfare to the colonization of the Americas explains how the Spanish were able to quickly conquer millions of people with a handful of soldiers but failed to do so in particular cases. As insurgents on the weaker side of a conflict have become more likely to win wars over time (Arreguín-Toft, 2001; Lyall & Wilson, 2009), answering the question presented in this paper had never been so pressing as it is today.

# THE ARAUCO WAR AS AN ASYMMETRIC AND COUNTERINSURGENCY CONFLICT

The Arauco War was a series of conflicts between the Spanish Empire and the Mapuche of central-southern Chile. Even though it occurred hundreds of years ago, the conflict has been well described by historians (Armond, 1954; Bengoa, 2008; Ferrando Keun, 1986; Gascón, 2007; Villalobos, 1995; Villalobos, Aldunate, Zapatero, Méndez Beltrán, & Bascuñán, 1982), ethnohistorians (Faron, 1960; Jones, 1994)6, and anthropologists (Brand, n.d.; Goicovich, 2007; León, 1983; Padden, 1957; Zavala, 2008). Moreover, there are plenty of primary sources written from the Spanish side that have survived to this day (Boccara, 2007, pp. 416-418).

The war is conventionally thought to have started quickly

For an overview of this methodology, see Mahoney & Rueschemeyer (2003)

Ethnohistory refers to the study of people without historical records of their own, by means of indirect historical accounts and anthropological and archaeological evidence, among other sources.

after the Spanish entered what is now known as Chile in 1536 with the battle of Revnogüelén, and to have ended in 1883 when Chile and Argentina conquered the Mapuche territory. Was the war actually so impossibly long? In recent decades, historians and ethnologists have argued against the traditional dates of the war (Villalobos, 1995). Villalobos claims that the conflict had a warring stage (1536-1655) and a peaceful stage (1655-1883) (Villalobos et al., 1982, p. 12). Boccara, on the other hand, argues that the Spanish were never peaceful towards the Mapuche but interacted with them in two different ways: by imposing their sovereignty over them (1545-1641), and by trying to civilize them through conversion to Catholicism (1641-1810) (Boccara, 2007; Foerster, 1996). At any rate, there is a general consensus that the so-called Arauco War was a long, violent conflict at least in its initial phase (mid-1500s to mid-1600s).

The Arauco War was a clash between unequal opponents. Although Spanish soldiers were always less numerous than their Mapuche counterparts, the Europeans had a decisive technological advantage given by the use of horses, metal, and gunpowder, which were unheard of in the Americas prior to their arrival (Salas, 1950)<sup>7</sup>. Also, hundreds and

sometimes thousands of yanaconas or indios amigos ("friendly indians") soldiers and auxiliaries accompanied the Spanish to war (Villalobos, 1995, p. 47). These native allies were initially brought from Peru and later on from the Spanish-controlled area of Chile8. The Mapuche also suffered a demographic catastrophe that weakened them as soon as they encountered the Spanish: like all other Native Americans peoples, the Mapuche had no immune protection against the diseases brought by conquistadors; it is estimated that epidemics killed up to eighty percent of their population (Villalobos, 1995, p. 46) or that it went from one million people to less than 150,000 due to diseases (Bengoa, 2008, p. 287). Although the Spanish were initially victorious in their conquest (Bengoa, 2008, pp. 245-287; Ferrando Keun, 1986; Villalobos, 1995, p. 47), the abovementioned Disaster

some of their technologies, like steel armor and gunpowder, in the hot and humid jungles of Central and South America and even adopted an Aztec padded cotton armor, which was more mobile and breathable than their metal or leather counterparts. However, metal in the forms of swords and shields wreaked havoc among Native Americans, whose main weapon was the bow and arrow. The horse, unknown in the Americas at the time, greatly reduced Native warriors' morale when they first encountered them.

Salas notes though, that their usefulness depended greatly on the territory. For example, the Spanish discarded

I thank Francis Goicovich for pointing this out to me.

of Curalaba was the tipping point of the war (Villalobos, 1995, p. 43). It is widely accepted that the Mapuche adopted insurgency tactics as the war progressed, (Bengoa, 2008, pp. 249–251; Ferrando Keun, 1986; Gascón, 2007, pp. 45–53; Villalobos, 1995, p. 47) and ultimately came out victorious out of this century-long conflict.

The Arauco War was both an asymmetric and counterinsurgency conflict. The Mapuche were relatively numerous but faced a stronger opponent aided by technology and Native American allies. It was also a long-lasting conflict that ultimately resulted in Mapuche victory thanks to the guerrilla tactics they adopted.

### COMPETING EXPLANATIONS

How can the outcome of the Arauco war be explained? Historians and anthropologists have already begun to tackle this question. Overall, the classical argument is that complex societies, being more hierarchical, are easier to conquer once their rulers and elites are eliminated, coopted or absorbed (Cruz, 2010; Villalobos, 1995, p.47). This explanation is nevertheless insufficient to explain why most tribal societies did not resist Spanish conquest but the Mapuche did.

Several non-mutually exclusive explanations have been presented for the Mapuche case. For example,

Guillaume Boccara (Boccara, 1999, 2007) argues that Mapuche society was inherently open to external influences and was able to assimilate and change to meet the demands of war against Spain (Boccara, 2007, pp. 191-193)9. Similarly, to Boccara, the explanation offered by Agustín Cruz emphasizes Mapuche capacity to innovate in the battlefield (Cruz, 2010)10. Goicovich (2006, 2007) argues that the Mapuche were successful against the Spanish for two main reasons: first, because they were able to create several peaceful alliances among themselves and with the Spaniards in Parlamentos (parleys) to ensure peace; second, because the Mapuche set up a network of military alliances called Vutanmapus to defend themselves against Spanish attacks -an

He makes the valid claim that Mapuche resistance to Spanish conquest was not surprising at all: «If the central reche [Mapuche] groups showed a great capacity to resist or, in other words, if [Mapuche] society was characterized by great sociocultural flexibility, it is because war, a central social fact in the material and symbolic production and reproduction of society obeyed a logic to absorb difference» (author's, translation). However, resistance does not necessarily mean victory, which is why it is important how both sides of the conflict approach war.

Unfortunately, Cruz never offers a definition of what he means by innovation and, therefore, he does not connect his argument to the literature on military innovations.

almost unparalleled development in the continent and only comparable to what the Comanche did in North America (Hämäläinen, 2008). Salas (1950) argues that the Spanish were able to conquer most Native American societies because their weapons, especially the sword and horse, prevailed over Native American clubs, bows and arrows. More specifically, Sauer (2014) argues that Mapuche culture was both resilient enough to keep certain core aspects of its culture and sufficiently flexible to adapt to Spanish invasion and colonization. All these answers are highly idiosyncratic and descriptive, and see the reason for Mapuche's success almost solely from the Native American side of the problem instead of analyzing it as the outcome of the interaction between two opposing sides. Can we learn broader lessons from the Mapuche success story?

Current theories of asymmetric and counterinsurgency warfare can shed light on this issue. Insurgencies have fought against stronger enemies for millennia, but they have not been thoroughly analyzed before the XVII century (Beckett, 2001a, 2001b; Bryant, 2004; Record, 2007). The Arauco War presents an interesting, understudied case of a weak defender winning a war against a dominant power, well before it has been shown that weak and insurgent actors began winning more wars (Arreguín-Toft, 2001;

Lyall & Wilson, 2009; Singh, 1971). Two of the most compelling theories that explain the outcomes of asymmetric conflicts are those proposed by Ivan Arreguín-Toft, and Jason Lyall and Isaiah Wilson. The former argues that the outcome of asymmetric conflict is determined by the interaction of strategies that each side uses; the later argue that the more mechanized the stronger side's military is, the lower are its chances to win a counterinsurgency war. Although their explanations may, to a certain extent, overlap these theories, they can potentially offer contradicting predictions of the outcome of an asymmetric conflict. The Arauco War, an appropriate case to test these two theories. offers two main insights. First, it shows how the strategic interaction argument does not explain well the outcomes of unequal wars when both sides use indirect strategies. Second, the mechanization argument can explain the outcome of the Arauco War - but only after it has been sufficiently generalized.

## THE STRATEGIC INTERACTION THESIS AND THE ARAUCO WAR: A POOR FIT

Arreguín-Toft's theory of strategic interaction claims that weak actors are more likely to defeat stronger opponents when the two of them use different strategies. He argues against Mack, who says

that the more powerful a state is, the less it is interested in winning a war (because survival is not at stake) in relation to its opponent (Mack, 1975); this makes leaders more vulnerable to pressures by publics or other elites, who try to convince them to get out of a war. which in turn makes them more likely to forfeit against a small, yet resolved enemy. In Arreguín-Toft's argument, the main cause of victory or defeat is not relative power but the interaction of the strategies<sup>11</sup> the two sides use, which can be direct or indirect. Direct strategies are aimed at eliminating the adversary's capacity to fight, whereas indirect strategies undermine the opponent's will and capacity to combat.

Direct and indirect strategies are different for strong and weak actors. For strong actors, direct strategy means direct attack, or "the use of military to capture or eliminate an adversary's armed forces, thereby gaining control of that opponent's values" (Arreguín-Toft, 2001, p. 100). He calls strong actor's indirect strategy barbarism, which consists of "the systematic violation of laws of war in the pursuit of a military or political objective...its most important element is depredations against noncombatants (viz., rape, murder, and torture)" (p. 101). The weak actor's direct strategy is direct defense, or "the use of armed forces to thwart an adversary's attempt to capture or destroy values such as territory, population, and strategic resources" (p. 103). Its indirect strategy is guerrilla warfare, defined as "the organization of a portion of society for the purpose of imposing costs on an adversary using armed forces trained to avoid direct confrontation" (p. 103).

There are therefore four strategy combinations. Strategic interaction theory argues that strong opponents are more likely to win same-approach interactions (direct attack versus direct defense, barbarism versus guerrilla warfare), while weak actors have better chances of winning different- approach interactions (direct attack versus guerrilla warfare, barbarism versus direct defense).

The underlying logic is that in same-approach interactions, there is no mediating factor between unequal powers, so wars should end quickly in favor of the strongest actor; in different-approach interactions conflicts linger, favoring weaker actors, which is where Mack's theory has more explanatory power.

Does strategic interaction theory explain the outcome of the Arauco War? At first glance it seems like it does: the conflict lasted for decades, and it is well known that the Mapuche were victorious when they applied a guerrilla warfare strategy

He defines strategy as «an actor's plan for using armed forces to achieve military of political objectives» (99).

against the Spanish. However, in order to test the theory, it is necessary to analyze the strategies both sides used, and how that changed their odds of victory.

## THE ARAUCO WAR BEFORE THE DISASTER OF CURALABA

In terms of strategies, it is possible to identify an initial period in the Arauco War when the Spanish obtained resounding victories over the Mapuche, which lasted roughly from the beginning of the conflict until the abovementioned Disaster of Curalaba in 1598. As Villalobos depicts (Villalobos, 1995, pp. 37–38), the level of hostilities among and Spanish and Mapuche between 1536 and 1700 varied over time. However, it also shows that the last year of "general offensives," this is, large scales battles between the two sides, was 1601, and that afterwards the Arauco War became something akin to a low-intensity conflict (Thompson, 1989). It was in the period prior to the Disaster of Curalaba that the Spanish settled and began to colonize Mapuche territory, which they subsequently lost. The interaction approach, in this first period of the Arauco War, does not support strategic interaction theory because the Spanish, who used an indirect approach, defeated the Mapuche, who applied a direct strategy.

Did the Spanish use an indirect approach? The Spanish engaged in several direct military engagements with the Mapuche, some of which they won (Bengoa, 2008; Ferrando Keun, 1986). However, the Spanish military and political strategy was defined by what Arreguín-Toft would call barbarism. Take, for example, Bengoa's account of the treatment given by the Spanish to the Mapuche population that inhabited the Penco region,

The consequence of what we could call the "surprise or defeat of Andalién and Penco" was very clear. [Spanish conquistador] Valdivia searched the whole land and brought before him the caciques to whom he spoke about labor and the goldmines. A few months later, he had put twenty thousand people to work in the Quilacova goldmines, not too far from Concepción on the rivers that bears that name and that flow into the Bío-Bío River. There are numerous testimonies that coincide on the number of workers of that famous deposit. The revenues recorded from the gold mines are considerable, and coherent with these numbers. We can calculate that the penco population under Spanish domination was of about one hundred thousand people, so there was a sizeable potential workforce. The impact of the

mining labor was disastrous. The Mapuche population on the northern shore of the Bío River never recovered. After a few vears they were decimated. The ones on the northern shore, from [rivers] Itata and from Laia, had come in massive numbers to the ceremonial battle, and they found an enemy that did not respect the rules of the game known to them. The newcomers had come to imprison the chiefs and seize workforce. This was a submission war. It was completely incomprehensible for the natives (Bengoa, 2008, p. 248. Author's translation)

Even though it might have not been understood in these terms then, the Spanish were waging an extermination war, in which the murder and enslavement of noncombatants and the destruction of nonmilitary values were widespread. Similarly, in a treatise he wrote in 1607 to explain to his countrymen why the Mapuche rebelled (Calderón, 1607), Spanish Melchor Calderón explained that the Spanish "disposed of them without discretion and seized their women and children" (Calderón, 1607, p. 15. Author's translation) that the "cruelties they have used against them are unbelievable" (p.18). They tried to eliminate Mapuche capacity and willingness to resist conquest<sup>12</sup>.

The Mapuche were on the losing side against the "barbaric" Spaniards even though they used a direct strategy against them. From the beginning, the Spanish considered the Mapuche living in the south of the Itata River, one of the most aggressive and belligerent peoples they encountered in the Americas (Boccara, 2007, pp. 118, 191)<sup>13</sup>. Indeed, Bengoa argues that the presence of clearly limited frontiers and military leaders made possible the "massive ritual reaction that existed when the war against conquest first began. In other places, other societies without a state and without a modicum of stability and

<sup>&</sup>lt;sup>2</sup> "Besides combatting the Araucanian armies, the troops engaged in a war of devastation; wherever they went they left a trail of the corpses of the elderly, women and children, burned-down rucas [houses], destroyed tools and devastated crop fields. Young men were killed or were horribly mutilated to teach them a lesson. They were also taken prisoner, and along women and children were sold to miners and estate owners from Concepción or Santiago..." (Villalobos, 1995, p. 42. Author's translation).

It is important to note that north of that river and as north as the Choapa River the inhabitants of Chile also spoke Mapudungun. However, this people, called Picunche ("People of the North") by the Mapuche, had a more sedentary lifestyle and had been subjected to Inca rule, and were thus arguably easier to conquer than their southern cousins.

social order simply dispersed, hid in the jungles, or just disappeared under the vigor of conquest" (Bengoa, 2008, p. 243. Author's translation). However, this does not mean that they knew the enemy they were facing - and how to defeat it. Mapuche warfare, like all Native American warfare, had a very strong ritual component (Bengoa, 2008; Boccara, 2007; Isaac, 1983; Smith, 1995), which emphasized one-on-one fighting, wearing eyecatching yet impractical attires, and displays of recklessness, boldness and bravery, such as the ones described by Alonso de Ercilla y Zúñiga in his epic poem La Araucana (Boccara, 2007, p. 130). The Mapuche reacted to Spanish aggression by attempting to destroy their enemy's capacity to fight. They used a primarily direct defense strategy in accordance with their traditions. However, their strategy failed against a stronger enemy that not only defeated them in the battlefield frequently but also -and more importantly-tried to destroy them as a society. As Bengoa puts it: "the enormity of the Mapuche population, its religious discipline, its absolute capacity to self-sacrifice, surprised the first Europeans that observed them. It was not militarily useful, and victory was for the King's regiments" (Bengoa, 2008, p. 215).

## THE ARAUCO WAR AFTER THE DISASTER OF CURALABA

The Battle of Andalién, in which the Mapuche lost three thousand men, was one of the last in which they directly faced their enemy in accordance with their traditions. As Ferrando Keun states, "the Mapuche from then on will never face the Spanish like they did in Concepción (Penco) or in Andalién with five, ten, fifteen or twenty thousand men fighting all at once" (Ferrando Keun, 1986, p. 25. Author's translation). Mapuche warriors learned from earlier generations' mistakes in the battlefield and from continuous interaction with the Spanish<sup>14</sup>. They did not only assimilate Spanish practices and technologies, like the use of cavalry and the construction of forts but, more importantly, they changed their strategy from direct defense to guerrilla warfare (Bengoa, 2008; Ferrando Keun, 1986). This process, defined as the "secularization of war" meant that war was less and less associated with religion, and its main goal became defeating the enemy at any cost not fulfilling a ritual (Bengoa, 2008, p. 216). By the time they ambushed Governor Mendoza in Curalaba, The Araucanos and Tucapelinos, this is, the Mapuches from Arauco

The reasons that explain Mapuche capacity to adapt and incorporate are well covered in Boccara (2007).

and Tucapel, would quickly learn the art of war from their enemies. They would break the system of large concentrations of warriors in processions and would begin to use more efficient groups, successive, small squadrons, similar to a relay system. They would incorporate the horse more and more in their attacks. They would use stratagems similar to surprise attacks and guerrillas, like ambushes, laying siege on forts, entering them in disguise or camouflaged under large haystacks, and finally, they would build their own fortifications. The secularization process would last for the rest of the century and, by the end of the sixteenth century, it was already completed (Bengoa, 2008, p. 251).

Closer to Spanish settlements, the change was not only strategic, but it also affected society as a whole. With the introduction of the horse, the Mapuche became more mobile and they hid in forests and mountain ranges when the Spanish attacked. They even adapted to the Spanish "scorched earth" strategy of destroying their crops (Foerster, 1996, p. 174) by planting fields in small patches, moving them to remote mountain valleys, focusing more on cattle ranching, and replacing indigenous corn with newly-arrived wheat, which could be harvested faster (Bengoa, 2008; Villalobos, 1995). Malones, as the Spanish called the Mapuche's razzias, forced Spain to

fortify the boundary between the colony of Chile and the territory lost after the Destruction of the Seven Cities<sup>15</sup>. In fact, Mapuche tactics became so successful that they expanded to the East across the Andes, imposing their language and culture on other indigenous peoples, creating vast trade networks, and threatening Spanish settlements as far as Córdoba and Buenos Aires, in nowadays Argentina (Boccara, 2007; Gascón, 2007, pp. 71-95; Zavala, 2008). The Mapuche had clearly gone from a direct to an indirect strategy - and from a defensive to an expansive position. The Spanish also changed their primary strategy by the end of this period. Unable to face their enemies directly (direct military confrontations) or indirectly (attacking civilian and nonmilitary targets), they began to build forts on the Bío Bío River to prevent Mapuche incursions to the north. Even though they signed several peace treaties and even recognized the Mapuche as an independent state, the Spanish still tried to impose their dominance through religious conversion carried out by missionaries (and the occasional skirmish). However, their

As the conflict waned, however, the Spanish were able to rebuild Valdivia on the coast in 1684 (motivated by a Dutch attempt to establish a colony there) and Osorno in 1796. Both cities were far from the Mapuche heartland.

position became more defensive than offensive (Foerster, 1996, pp. 131–140), and by the mid-1600s, the boundary between the two societies, however permeable, was already established.

The development and outcome of the Arauco War brings to light several issues in strategic interaction theory. First, it is problematic to assign one kind of strategy to each actor when the two use both kinds of strategies simultaneously. For example, from the beginning, both the Spanish and Mapuche used direct strategies against each other and subsequently, when the Mapuche turned to guerrilla warfare they also adopted from the Spanish the construction of forts. While it may be possible to assign each actor in the Arauco war a primary strategy, this may not be as easy in other conflicts without risking oversimplification.

Second, and more important, the outcome of the different interactions in the Arauco War is not consistent with the theory's hypotheses which states that, same-approach interactions tend to be won by the stronger side and that different-approach ones favor the weaker actor. Initially, the Mapuche used a direct strategy (direct defense) against the Spanish, sending army after army to the battlefield. The Spanish primary strategy was indirect (barbarism), and they were able to defeat the Mapuche, set-

tling in their territory. The Spanish, contrary to the theory's expectations, won this different-approach interaction. Why did this happen? Wars where the weak fights directly and the strong indirectly are very infrequent in modern times, so an analysis that merges both types of different-approach interactions into the same category would not pick up the difference between directindirect and indirect-direct interactions. Indeed, its results may be driven by the more common direct attack-guerrilla warfare interaction. Arreguín-Toft suggests that in order to use barbarism against a weak opponent, a strong actor must pay political costs, both domestically and internationally (2001, p. 114, f.n. 68). This assumes that conflict visibility, a democratic weak contender, and the presence of an international community may influence how much a strong state is willing to use barbarism, and make it fall short from annihilating the weak actor. In the sixteenth century, Spain – as most states throughout history - did not have to deal with these cost-inducing factors.

When the Mapuche adopted an indirect strategy (guerrilla warfare) to counter Spain's barbarism, they prevailed and secured their independence. In the case of the Arauco War, it is not supported the hypothesis that in general same-approach interactions (and specifically indirect-indirect ones), strong states win. Again, this kind of interactions may be rare. The results of a large-n analysis that combined rare barbarism-guerrilla warfare and common direct attack-direct defense interactions into the same analytical category would, therefore, be driven more by the outcome of the former than the latter.

In terms of power asymmetry, it is unsurprising that the Mapuche resorted to guerrilla warfare to counter the Spanish: "it turns out that adversaries do not give up the armed struggle under these conditions; rather, any smart enemy goes unconventional" (Kilcullen, 2009, p. 23). However, strategic interaction theory fails to explain why the Mapuche prevailed in a sameapproach interaction. What was special about the Mapuche change in strategy that allowed them to prevail? Why did the Mapuche win this interaction? The answer is related to the extent to which they adapted to guerrilla warfare not only as a military strategy but also as a way to organize their society. Boccara claims that the clash with the Spanish was so significant that it amounted to an "ethnogenesis," this is, an entire cultural identity shift, causing the old Reche or Che ("True People" or "People") to become the Mapuche ("People of the Land") (Bengoa, 2008; Boccara, 1999, 2007; Sauer, 2014)<sup>16</sup>. Mapuche insurgents earned the full support of their communities because the warriors' success was inextricably linked to their survival as a people in the face of Spanish extermination.

## THE MECHANIZATION THESIS AND EARLY COLONIAL WARFARE: A COMMON GROUND?

Lyall & Wilson (2009) offer an alternative explanation for the outcomes in counterinsurgency wars. They show that incumbents (governments in power) have been decreasingly able to defeat insurgents

Bengoa (2008, p. 217) depicts the situation vividly, «The natives removed their dwellings from the river shores, they have abandoned the crops, they do not sow the slopes and hills like they used to do, and they take refuge in their cattle, which is easy to transport. The native society that results from the massacre is totally different from the original one, that peaceful society of the tree-lined paths, were they gathered to drink, to play chueca, to solve their justice affairs, to fall in love, and celebrate. The beautiful drinking fountains and the farms to live in peace are gone. Nothing remained from the old times. Women do not wear gold earrings anymore, fearing Spanish greed. They stopped wearing the colorful beads that caught the attention of the first visitors. The blue used to paint faces, to dye the sky-blue ponchos is gone. The women hid in their black shawls, and sank in their sad, rhythmic music».

since the nineteenth century (Lyall & Wilson, 2009, p. 69), which they argue has been caused by some change in the nature of incumbent armies. These armies have gone from "foraging" to "mechanization." The former implied "monetary payments, forced requisition, and simple looting to acquire provisions from populations located in or near the conflict zone rather than from the national homeland" (p. 73); in the latter, "conflict zones could provide neither increasingly specialized supplies, such as fuel and parts, nor the sheer quantities required to sustain large modern armies" (p. 75).

Why has mechanization made incumbents more likely to lose counterinsurgency wars? Unlike foraging armies, who perforce have to know and interact with locals to obtain supplies, mechanized armies get resources through supply lines, which isolates them from their environment. Therefore, it is harder for them to solve the "identification problem," this is, the common issue in counterinsurgency wars that arises because "[i]rregular combatants and the spies of either side hide among the civilian population" (Kalyvas, 2006, p. 89). Mechanized armies' diminished capacity to tell combatants from noncombatants and to gather intelligence from locals, results in a "counterinsurgency that fuels, rather than deters, insurgent recruitment" (Lyall & Wilson, 2009, p. 79). Modern

militaries find hard to overcome the urge to mechanize to appropriately engage with insurgent opponents (Lyall & Wilson, 2009, p. 80).

This brief overview of the mechanization thesis would suggest that it is not applicable to the Arauco war – the mere fact that the Spanish armies were a premodern force makes them an unlikely candidate for an analysis that emphasizes technology. Indeed, the Spanish forces neatly fit into the category of "foraging" armies, which are "often quite rudimentary in their level of technological sophistication" (Lyall & Wilson, 2009, p. 73).

However, a case can be made for the technological divide between Spanish and Mapuche. Initially, the Spanish, just like modern mechanized armies, used "high-tech" supplies (horses, gunpowder, steel, leather) brought from Peru and Spain to fight the locals (Bruhn de Hoffmeyer, 1986, p. 11). Although on a day-to-day basis it was more common for conquistadors to rely on spears and sabers (Bruhn de Hoffmeyer, 1986, pp. 10, 41), these resources could not be foraged outside Mapuche territory. Paraphrasing Lyall and Wilson, the conflict zone in southern Chile "could provide neither...specialized supplies... nor the sheer quantities required to sustain large [pre]modern armies" (Lyall & Wilson, 2009, p. 75).

As the conflict dragged on, and akin mechanized armies, the Spanish army in southern Chile did not engage in foraging in contested territory for two main reasons. First, because of the development of the encomienda<sup>17</sup> system in central Chile, which ensured the supply of materiel outside the conflict zone. Secondly, the establishment of the Real Situado created a line of supplies away from the frontlines.

In 1600, the court decided to give 82,500 pesos annually for three years, under the assumption that this sum would help to restore the dominance of the [Spanish] Christian army. The conflict did not recede, and the amount had to be increased and the deadline extended, until in 1606 was fixed in 293,000 pesos, which was maintained until the end of the century. At the beginning of the next century, the conflict disappeared and the situado was reduced to 100,000 pesos (Villalobos, 1995, p. 107)

The Real Situado made it possible in Chile to have the only permanent army in the Spanish Americas and, therefore, reduced the need to forage and pillage to

maintain the soldiers guarding the border. This made the Bío-Bío the de facto and eventually the de jure border between the Spanish Captaincy General of Chile and the Mapuche territory.

However, the core of Lyall and Wilson's argument is not that mechanization makes winning a counterinsurgency war harder per se, but that it makes solving the identification problem more difficult. Mechanization can be seen as one of many impediments for effective intelligence gathering in asymmetric conflicts. They suggest that cultural differences may also make the identification problem worse: "Acquiring this information in turn requires a high rate of interaction between counterinsurgent and population so that the requisite skills-including language and cultural awareness - are obtained and connections forged" (Lyall & Wilson, 2009, p. 75, emphasis added). Therefore, similarly to mechanization, cultural differences can "inhibit the collection and vetting of the context-specific information required to wield power discriminately" (Lyall & Wilson, 2009, p. 76).

The Spanish tackled the identification problem in two ways simultaneously. First as, mentioned above, they used indios amigos ("friendly Indians"), who not only served as auxiliary and scouting troops but also provided the conquistadors

Encomiendas were large estates in which a Spanish patron, the encomendero, used native labor to cultivate his lands in exchange for the nominal education and evangelization of the native labor.

with valuable information about the terrain, and the numbers and movements of the enemy. Their importance decreased, however, as the Mapuche resorted to guerrilla warfare, and during the Destruction of the Seven Cities most collectivities and individuals who had converted to Catholicism and cooperated with the Spanish deserted or were killed by their fellow countrymen (Bengoa, 2008). On the other hand, later in the conflict, the Spanish traded with natives. north and south of their area of control. This increased their ability to gather reliable information from merchants who traded Mapuche cattle, horses and goods stolen in Argentina for Spanish liquor and manufactured goods. At that stage of the conflict, however, after the destruction of all Spanish settlements between Bío-Bío River and Chiloé Island, this information was used to defend their fortifications and settlements from malones or making short retaliatory incursions into Mapuche territory to capture and enslave prisoners (called malocas, see Carrasco, 2005), rather than to make any serious attempt at reconquering them.

Second, and perhaps more critically, the Spanish dealt with the identification problem by ignoring it altogether. As mentioned above, the Spanish initially adopted barbarism. The cultural differences between conquistadors and Native

Americans were abysmal - for a long time even Spanish theologians argued whether Indians were human beings and could therefore be baptized and converted. The differences were even more insurmountable in the case of less hierarchical societies like the Mapuche polity. In fact, when the Spanish conquered the Incas and Aztecs they intermarried with the elites - Óñez de Loyola, the Governor killed in Curalaba, was married to Clara Cova, the niece of the last Inca emperor. The situation in southern Chile was different, where the Spanish encountered people "who refused to be human from their cultural point of view, to recognize a king, to serve" (Bengoa, 2008, p. 247). The Spanish, therefore, had few qualms about enslaving, killing, and subjugating the Mapuche, treating warriors and noncombatants alike.

It is hence unsurprising that the Mapuche refused to negotiate while the Spanish practiced barbarism, as a 1569 letter from governor Bravo de Saravia to the King of Spain attests:

We sent clerics and other people and some of their own to talk to them and forgive in the name of His Majesty the crimes that they have committed here, and to offer them good treatment hereon after, and they not only do not want peace but also say that they shall eat us or banish us from the land and many other blasphemies (quoted in Bengoa 2008, p. 246).

When the Mapuche society, as a whole, turned to insurgency to resist conquest, it became impossible for the Spanish to directly address the information problem – they had turned virtually the entire polity against them. John Nagl's quote of Harold K. Johnson, Chief of Staff of the U.S. Army during the Vietnam War, has several parallels with what the Spanish experienced in the forests of Chile four hundred years earlier, underscoring the pervasiveness of the identification problem,

We were indiscriminate in our application of firepower, in the true sense of being discriminating, because too much of it went out on a relatively random basis. If we were really oriented after people we should have been discriminating against those people that we were after and not against all people. I think we devastated the countryside. Now I don't know what the alternative is (Nagl, 2002, p. 175)

The Spanish defeat in the Arauco War could be understood in terms of the Spanish army incapacity to learn

as an organization, as Nagl argues in the case of the Vietnam War<sup>18</sup>.

It is possible that the outcome of the Arauco War would have been different if the Spanish had discriminated between warriors and noncombatants. Paraphrasing Kilcullen, "assuring [the Mapuche] that [Spain] will exercise its power responsibly, sparingly, virtuously, and in accordance with international norms is therefore not an optional luxury or a sign of moral flaccidity" (Kilcullen, 2009, p. 24). In sum, the theory presented by Lyall and Wilson accurately explains the outcome of the Arauco War but only when it has been generalized to include variables that exacerbate the identification problem beyond mechanization.

### Conclusion

Analyzing the Arauco War through the lens of two competing theories of asymmetric warfare offers several insights. First, regarding strategic interaction theory, the Arauco War shows that hypotheses derived from collapsing both types of same-approach and different-approach interactions can be misguided. The stronger Spanish defeated the Mapuche, a relatively

Understanding organizational culture of the Spanish military in the early modern era is nevertheless beyond the scope of this essay and is the subject of future research.

weaker actor, when the two factions used different strategies, but lost when the Mapuche secularized their warfare and used the same type of strategy that their enemies used. Arreguín-Toft proves that strong states are more likely to win sameapproach interactions and that weak states have a better chance at winning different-approach ones. However, as this analysis shows, it does not necessarily follow from his evidence that strong states have the same probability of winning both kinds of same-approach interactions, or that weak states will have similar favorable odds at both types of different-approach interactions. As Lyall & Wilson (2009, p. 71) argue, "treating these types of wars as functionally equivalent is problematic if the determinants of outcomes vary systematically by conflict type and time period".

The mechanization thesis, which argues that mechanized armies have problems telling civilians apart from insurgents, offers a valuable explanation for the outcome of counterinsurgency wars. However, its focus on mechanization – a product of the time period that inspired the mechanization thesis – as the sole obstacle to solve the identification problem leaves out other factors that also aggravate the identification problem. Analyzing the Arauco war as a counterinsurgency conflict shows that cultural differences in general, and the Spanish

barbarism in particular, may also influence the outcome of wars. As Villalobos puts it, Spanish failure to solve the identification problem meant that "there was no one to trust or negotiate with and the war became an evasive ghost without the existence of a body to strike" (1995, p. 46).

Armies that have serious difficulties to solve the information problem are less likely to defeat insurgencies. However, this is not enough to explain why the Mapuche prevailed over the Spanish south of the Bío-Bío River while other similar and more advanced cultures did not. Drawing from both theories of asymmetric warfare, it can be concluded that the Mapuche won the Arauco War because they were able to change a counterproductive direct strategy (face-to- face confrontation) for a more appropriate indirect one (guerrilla warfare). This change in strategy, combined with Spanish incapacity to surmount the identification problem, lengthened the conflict and made it so costly for the Spanish that they were forced to respect Mapuche independence at the south of their fortified frontier.

Further research on other cases fication problem leaves out other factors that also aggravate the identification problem. Analyzing the Arauco war as a counterinsurgency conflict shows that cultural differences in general, and the Spanish Further research on other cases of resistance to Spanish conquest, as well as resistance to other colonial powers in other periods and continents, presented that Jíbaros, Chichimeca, Yaqui, Guajiro, Jumano, Apache, Comanche, Pueblo

and other American indigenous peoples (Barrett, 2002; Boccara, 2007, p. 119, f.n. 254; Hämäläinen, 2008; Liebmann & Murphy, 2011), can benefit from applying the framework used in this paper. Current counterinsurgency efforts may also learn from the Mapuche experience: strong actors should never underestimate the capacity of weak actors to innovate and mobilize entire societies - especially in the case of less hierarchical polities. No matter how strong an army is, it should always consider building rapports with the local populations to overcome factors that make the information problem insurmountable, either high degree of mechanization or major cultural differences. The Arauco war also shows that unleashed barbarism, whether it is against a conventional army or a guerrilla, makes the distinction between combatants and noncombatants blurry, and can therefore lead to defeat, no matter how strong the "barbaric" side is.

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