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Слышишь меня? Can you hear me now?

Signaling Theory and the Cold War

Curtis Sedlacek

Abstract: In this paper the Cold War between the United States and the Soviet Union is analyzed using a variation of signaling theory. The signals sent between the two nations were important as they could be used by both countries to achieve victory, defined as one system of government and economics triumphing over the other without direct military conflict. To achieve victory both countries had to signal their fitness to the people of the world. By treating a conflict as a collection of signals it may be possible to understand what signals lead to what behaviors and see these signals in the current relationships between nations.

Signaling theory allows several events of the Cold War to be understood more clearly as the actions of each nation are interpreted as signals meant to convey more than just the action itself.

Introduction

Signaling theory has come a long way since the ideas first presented by Thorstein Veblen and his theories of conspicuous consumption (Veblen 1994). The idea that a person is communicating with other people through more than just spoken language or the written word may seem obvious, but Veblen was one of the first to begin defining what forms exactly these nonverbal communications may take. He raised the idea that perhaps people were communicating with each other through the conspicuous consumption of goods and services, in order to prove to those both in their social groups and outside their social groups that they were someone who was important or had wealth. The conspicuous consumption of resources such as time and

money can be an intentional signal to others about the fitness of one individual compared to another.

Out of Veblen's conspicuous consumption theory several other ideas have arisen. Included in these theories are Bruce Trigger's ideas about monumental architecture being a form of symbolic behavior (Trigger 1990), McGuire and Hildebrandt's ideas of costly signaling and prestige hunting in regards to Great Basin foragers (McGuire and Hildebrandt 2005) and Bliege-Bird and Smith's ideas about reliable signaling of condition-dependent qualities in many different societies (Bliege Bird and Smith 2005). Signaling theory has been applied to horticultural gatherer groups and the conflicts between them (Roscoe 2009).

In this paper a variation of signaling theory will be applied to a conflict between nations, in particular the conflict between the United States of America and the Union of Soviet Socialist Republics (U.S.S.R.) during the Cold War in order to demonstrate that signaling theory can be successfully used in this context. The Cold War between the United States and the Soviet Union was chosen because it is a conflict between two large nation states with an abundance of literature available that discuss all aspects of the conflict.

Background

The United States and the Soviet Union were at similar places in their development as nations at the end of World War II. The Soviet Union had emerged from the conflict with millions dead but also with one of the largest armies in the world. It had evolved from a "backwater" country struggling to modernize to a full-fledged manufacturing center of the world. Similarly the United States had started World War II in the grips of the Great Depression with one of the smaller militaries in the world, but by the end the United States had developed a large industrial complex and a military with cutting edge technology that was backed by the might of the atomic bomb. Both countries had been war time allies but without the common enemies of Nazi Germany and Imperial Japan the friendship began to quickly deteriorate. The Soviet Union was leery of the United States monopoly on atomic weapons and the United States was worried that communism would spread like a cancer throughout the world if it was allowed to take hold in any other country.

The Cold War between the United States and Soviet Union would be fought in third world countries with intermediaries, in the crucible of public opinion and with a feint - counter feint of military action, a game of chess that brought the world to the brink of fiery destruction several times. The decades of tensions were filled with signals of both sides, as they attempted to communicate various ideas and thoughts and establish dominance over the other without open conflict.

Various Types of Signals

There are various types of signals that can be sent between nation states. This typography was created for conflicts between nation-states. They are as follows:

Forms of Intentional Signaling

<u>Direct Signaling</u>- In direct signaling, the sender informs the receiver that the signal is specifically for the receiver and the signal is clear in expressing what the sender wants to send.

<u>Indirect Signaling</u>- In indirect signaling, the sender sends a signal without notifying the receiver. The signal is sent with the hope that the intended receiver will receive it and understand the message. This form of signaling is dangerous as the intended receiver may not get the signal or the signal may be received by the wrong receiver.

Methods of Signaling

<u>Third Party</u> – In the third party method of signaling the sender uses a third party, usually a neutral party or ally of both the sender and the receiver to send the signal. This allows the sender and the receiver to maintain deniability if the signal is picked up by any other party.

<u>Through the Media</u> - Similar to third party signaling, this form of signaling is when the sender and receiver communicate through the media. This allows the two parties to signal to each other and the world at the same time.

<u>Direct communication</u>- This is when both parties signal each other directly, for example through phone calls between the President of the United States and Premier of the Soviet Union.

History of the Cold War-United States

The Cold War, a term originating with the British author George Orwell, began immediately at the end of World War II. It can be said that the Cold War began even before this time as the Allies of World War II (Great Britain, the United States of America, and the U.S.S.R.) had begun jockeying

for various positions of power and influence before the last bullets of World War II had even been fired.

The concerns of the United States about communist influence spreading were confirmed when the Soviet Union annexed several countries outright (including Poland and East Germany) and installed puppets allowing *de facto* Soviet control of several other Eastern European countries (Hungary, Czechoslovakia and others).

Harry Truman had assumed the Presidency after the death of Franklin Delano Roosevelt and had concerns that electoral victories in Eastern European countries could allow communism to spread to the Western European countries and as such he began a policy of containment that he defined in the Truman Doctrine. The Truman Doctrine of March 12, 1947 made it a policy of the United States to support people who were resisting subjugation by outside forces (Craig and Logevall 2009).

The Truman Doctrine made plain the American goal of resisting the spread of communism, thereby making an enemy of the Soviet Union. The Truman Doctrine also made clear the American strategy of containment when it came to stopping communism. Also, President Truman feared that if one country fell to communism, such as Greece, then the one next to it would also fall to communism, such as Turkey. This idea came to be known as the "domino effect" and would be a guiding principle of American policy during the Cold War (Snyder 1995).

Part of the United States' response to the perceived threat of communist expansion was the implementation of the Marshall Plan, an economic reconstruction plan funded by the United States to allow war damaged Western European countries the chance to rebuild before communist movements could gain strength (Belmonte 2008). Another part of the United States policy that was meant to deal with the communist threat was the establishment of North Atlantic Treaty Organization (NATO), a mutual defense pact between the United States, Canada, and the Western European countries, which ensured that any attack on one country would be an attack on all of them, ensuring mutual defense.

The United States would continue to challenge the Soviet Union on a world-wide stage for decades, both publicly and clandestinely. Throughout this paper I will give several examples of these efforts to stop the expansion of communism.

History of the Cold War-U.S.S.R.

The Soviet Union, led by Joseph Stalin, at the end of World War II had become a large military superpower after decades of being considered a "backwater" country, much as World War II also allowed the United States to emerge from the Great Depression. The Soviet Union aided reconstruction efforts in Eastern Europe, transforming those countries into Soviet satellite states and founding the Warsaw Pact in 1955, which was a mutual defense pact, signed by the Soviet Union and its satellite nations as a response to NATO (Craig and Logevall 2009).

The Soviet Union gained control of the eastern part of Berlin at the end of World War II as the result of agreements with Great Britain and the United States. This would prove to be a particularly contentious agreement as the Soviet Union tightened its control of East Germany and Berlin with the construction of the Berlin Wall. The Soviet Union would continue to challenge the United States for the next several decades through propaganda efforts directed at discrediting the United States, which will be discussed in detail later.

Another key point that must be remembered throughout this paper is that both sides of the conflict were operating under the idea of Mutually Assured Destruction or MAD. The idea behind MAD was that if one country launched a nuclear strike, the other country could launch their nuclear strike before the first country's missiles hit, ensuring the destruction of both countries and most likely the world. Therefore, neither country could use their massive nuclear weapon arsenals for fear of being destroyed (Craig and Logevall 2009).

The threat of MAD overshadowed both countries during the Cold War and had significant influence on the power of signals and the form in which they were sent. Both countries displayed a cautious nature when signaling each other, as neither wished to provoke the other to retaliate with nuclear weapons.

Propaganda

Propaganda is the deliberate spreading of information to help or harm a person, or in this case, a nation (Merriam-Webster 2011). Propaganda is a form of indirect signaling, as defined previously in this paper, but it is only effective if the source of the propaganda is not discovered by the receivers. If the receivers suspect that information they are receiving is propaganda then they will not trust it.

Propaganda can be divided into two different categories, internal propaganda and external propaganda. With internal propaganda a government tries to influence its own people to believe certain information, whether that information is how successful their country is or how evil another may be. In external propaganda a government is trying to influence non-citizens, possibly of a particular group, like a rival country's citizens or the world in general. Both countries during the Cold War used propaganda to influence public opinion against their opponent and increase public opinion for their own country.

In the United States, the government ran a large public relations firm of 10,000 people spread throughout 150 countries, with an operating budget of two billion dollars per year (in 1960s dollars), all for spreading propaganda in favor of the United States and against the Soviet Union (Snyder 1995). This huge organization engaged mainly in external signaling aimed at the people of the Soviet Union and the rest of the world. To do this, massive short wave transmitters were constructed throughout the world and by 1986 American broadcasting corporations were broadcasting 2,411 broadcast hours per week into the Soviet Union and its allied nations (Snyder 1995).

The government also used third party groups in order to send signals to the Soviet Union. For example, agents from the Central Intelligence Agency (CIA) paid European journalists to write about plans the United States had to deploy neutron bombs to Europe. While the bombs were never deployed, the news caused concern among Soviet officials (Snyder 1995).

The United States used its ability to propagandize to show the people of the Soviet Union how much better life was in the western world, and to call out Soviet leaders who were lying about the capabilities and strength of the Soviet Union. This directly conflicted with the Soviet Union's internal propaganda that the United States was a cesspool of violence and crime and the Soviet Union was the more powerful and successful of the two countries. Using its propaganda resources the United States was able to directly signal the people of the Soviet Union and show them an alternative to the Soviet lifestyle.

The Soviet Union, unlike the United States, was unable to get its radio signals to the United States (its closest transmitter being in Cuba) and even when it could get radio transmissions to the United States, few people wanted to hear Soviet news mixed with Soviet military music. Due to these difficulties, the Soviet Union focused on signaling to other parties in the world (Snyder 1995).

The Soviet Union used propaganda to portray the United States as less than perfect and at times attempted to portray the United States government as evil, such as when it attempted to blame Bhopal's Union Carbide plant disaster of 1984 in India, in which two thousand people were killed, on the United States government (MSNBC 2009). Pro Soviet newspapers stated that the explosion happened as part of an experiment to see how people reacted to gas poisoning or was the result of an American made chemical bomb being built there (Snyder 1995).

The Soviet Union also attempted to jam incoming American radio signals at an expensive cost of 1.2 billion dollars per year in electricity alone (Snyder 1995). This was quite a burden to a country that had lost the Chernobyl reactor in 1986 and was having a hard time producing enough electricity in order to power its factories, let alone massive radio jammers.

Both countries spent time propagandizing to the world to signal that their respective ways of living were the better way. By using indirect signaling and signaling to third parties each country hoped to win more and more supporters and weaken their opponent. The ability of each respective country to recruit new allies forced the other to respond, much like the nuclear weapons build-up of that was also taking place.

The Berlin Blockade and Airlift

During the blockade of Berlin (24 June 1948-12 May 1949) the Soviet Union blocked all railway and road access points to the parts of Berlin that were united under Allied control, which was an attempt to force Allied parts of Berlin to depend on the Soviet Union for essential supplies thereby giving the Soviet Union *de facto* control over all of Berlin. The United States and its allies had scaled back their armies at the end of World War II, and were in no position to challenge the Soviet blockade with military forces (Craig and Logevall 2009).

The United States and its allies were unable and unwilling to respond militarily, as a military response could provoke a war between the Soviet Union and the Allies. They chose to respond to this situation with a massive airlift operation in an attempt to keep West Berlin from becoming dependent on the Soviet Union.

With the Berlin blockade the Soviet Union sought to show the United States and its allies that the Soviets had considerable political and military influence. The Soviet Union had spent the years since the communist revolution being regarded as a underdeveloped nation, but with the end of World War II, the Soviet Union now had vast modern military resources

upon which to draw and with the blockade of Berlin, the Soviet Union was able to signal to other nations that it was capable of exerting its will on other countries and on Eastern Europe specifically. The blockade also sent the signal, whether intentional or not, that the Soviet Union would spread its influence by force if necessary and it challenged the United States and allies to do something about it.

The blockade of Berlin forced the United States and its allies to respond. The signal sent by the Soviet Union was appeared to be an honest one, as it was backed by a million and half soldiers stationed in Germany at the time but the Allies realized that the Soviet signal was really a false one, as these soldiers could be destroyed with one or two atomic bombs. The United States was reluctant to use them as it would result in the deaths of many German civilians but would as a weapon of last resort.

Besides nuclear weapons, the disassembled militaries of the West did not have the strength to break the blockade by force, and any attempt to do so would likely lead to war with the Soviet Union, a war for which the weary population of the United States would have little patience.

Faced with this stalemate, the Allied nations chose to respond to the Soviet signal with a multi-component signal. First, their signal had to achieve the practical goal of supplying the people of Berlin so they would not starve or freeze to death. Second, the signal would also need to let the Soviet Union know the United States and its allies would not allow the Soviet Union to dictate terms through force. And third, the Allies could call the Soviet Union's false threat of military force, as any conflict between the outnumbered Allies and the large Soviet Union would force the Allies to use atomic bombs, a threat which the Soviet Union had no answer to at that time.

A massive airlift was the signal that the Allies were looking for. It allowed the Allies to counter the Soviet signal with the multi-component answer they needed. It allowed to them to keep supplying Berlin without direct confrontation with Soviet troops. Also, it allowed them to score a public relations victory as the Allies were seen as saviors to the people of Berlin while the Soviets appeared to be the evil oppressors. This increased the popularity of American and Western ideas and decreased the popularity of the Soviet Union and along with it, communism. Another component to the signal that may have been unintentional is that it showed the Soviet Union how impotent it was to stop the airlift. Building roadblocks to stop Allied trucks was one thing, shooting down an Allied aircraft was another thing entirely (Craig and Logevall 2009).

The Berlin Airlift was a massive success, delivering an average of 8,000 tons of food and fuel a day (Craig and Logevall 2009). It was a direct

signal to the Soviet Union that the United States and its allies would not allow the Soviet Union to push them around with military or political pressure. The United States used its massive resources, both in supplies and in aircraft to also signal to the Soviet Union the great expense both in material and money that it willing to use in order to frustrate the Soviet Union's intention and achieve the United States' goals. The Berlin Airlift forced the Soviet Union to lift the blockade as it was now a pointless and expensive exercise and it also forced the Soviet Union to the negotiating table with the Allies in order to formalize the status of Berlin, which was the ultimate goal of the signal (Craig and Logevall 2009).

The Berlin Wall

In 1952 the border between East and West Germany was closed and a barbed wire fence was erected, but a loop hole allowed emigration to continue in Berlin. After a few years of mass emigrations from East to West, and the subsequent brain drain that followed it, the Soviet Union found the situation untenable. Construction on the Berlin Wall (officially known as the Anti-Fascist Protection Wall by East German authorities) began on 13 August 1961. The reasons given for the wall's construction by East German authorities was that the wall was needed in order to stop "fascist" elements from infiltrating East Berlin and challenging the will of the people, rather than stating its true goal of being a way to strictly enforce emigration control (Craig and Logevall 2009).

The Berlin Wall was 87 miles long and its first version consisted of the roads being torn up and barbed wire entanglements constructed. Houses near it were razed and a large open space was created, which allowed for an open field of fire from the guards patrolling the border. The wall would go through several evolutions before becoming the iconic concrete wall that became infamous in Ronald Reagan's speech on March 23, 1983 (Federation of American Scientists 2011). In 1962 the wire fence was improved to stop defectors, the concrete wall was added in 1965, and the final version of the wall was constructed in 1975. The United States and their Western allies viewed the wall with concern as it became the physical symbol of the Iron Curtain that Winston Churchill warned was descending on Europe (Craig and Logevall 2009).

The Berlin Wall did not fit Trigger's definition of monumental architecture at first (Trigger 1990). It was purely a practical construct with the simple purpose of stopping people from crossing the border, not the supra-functional aggrandizing of a structure that is diagnostic of monumental

architecture as defined by Trigger (Trigger 1990). Later though, as concrete and guard towers were added, the structure did become a piece of monumental architecture. There was not a need to have a concrete wall as tall and thick as it was built in order to stop people from crossing the border, it was made larger and out of stronger, more expensive materials in order to signal to people on both sides of it how seriously the Soviet Union treated the idea of uncontrolled emigration (Trigger 1990).

The Berlin Wall was a signal on many levels, beyond its simple function of physically stopping emigration. The Soviet government wanted it to be an internal signal of their commitment to the protection of their people, but it was seen by many people in East Berlin as a physical reminder of the restrictions on their freedom to move about as they chose. The Wall was a symbol of the Soviet Union's ability to physically enforce its will on its people.

To the West, the Wall was a reminder of the Soviet Union's ability to construct a massive defensive structure right along its border and it was unable to do anything about it. It was a signal of challenge to the United States, to which the United States could do little to respond.

Intercontinental Ballistic Missiles (ICBMs)

A ballistic missile is a missile that follows a sub-orbital ballistic flight path with the purpose of delivering one or more warheads to a target. The development of these missiles combined with the development of more powerful nuclear warheads gave both the United States and the Soviet Union the capability to deliver irreparable damage to all life on Earth. It also gave both countries the ability to strike one another in a matter of minutes, with little or no warning.

Both the United States and the Soviet Union built massive ICBM facilities, consisting of hundreds of silos and extensive command and control facilities. Each nation also built thousands upon thousands of nuclear weapons with estimates of the Soviet Union weapons arsenal reaching 45,000 warheads in 1986, much more then was required to defeat each other (Cochran et al. 1995). In fact each side created enough nuclear weapons to destroy all life on Earth several times over (Grace 1994).

Both sides were afraid that one would out produce the other, even after they had reached the point where they could kill everyone on the planet. Though neither side could use the weapons they had built, they continued the costly and expensive process of building them because if the other side built more, they would "win".

The construction of nuclear weapons was both an internal and external signal. The external signal was to each other as nations, that any attack would be met with the total destruction of both sides. The ICBM systems built by both countries did not fit Trigger's requirements for monumental architecture when the first ones were built, as they were practical tactical structures, built strong enough to allow the launch of their deadly payload but not made to be ostentatious. The ICBM system eventually did meet Trigger's monumental architecture requirements when the number of silos and bunkers constructed far exceeded what was needed to destroy the enemy (Trigger 1990). After each country had the capability to completely destroy the other they nevertheless continued to build more silos and nuclear weapons to fill them in order to send a signal.

The external signal that each country sent was that if you attack me, then I will destroy you, and make the rest of world uninhabitable as well, a signal that each side received and which was formalized in MAD. The continued construction of missiles also sent the lesser signal that each country was wealthy enough to continue to afford to build missiles that it did not need, a signal of wealth and prosperity sent by the conspicuous consumption of resources (Veblen 1994).

There was also an internal signal that was sent to each country's respective people, this signal being that both the Soviet Union and the United States governments could protect their citizens from attack by making an attack so costly that nobody would dare do so.

Each side began building the weapons in order to ensure the other side would not attack, but each side became victims of their signals. In order to ensure that they fulfilled their promise of protection to their citizens they were forced to continue building them at the expense of other programs that could have used the money and in both countries there was the fear that the other side would out build them, which would lead to that side "winning", though neither side could use the weapons (Craig and Logevall 2009).

Strategic Defense Initiative or "Star Wars"

This idea was announced on March 23, 1983 by Ronald Reagan. The Strategic Defense Initiative was an effort by the United States to create a space based missile defense system that could provide near total defense against a massive ICBM attack. The idea was developed as a response to the current Soviet-US doctrine of MAD, Mutually Assured Destruction (Craig and Logevall 2009).

The United States had the idea that such a system could take the world back from the brink of nuclear armageddon if Soviet ICBMs could be destroyed from space before they reached their targets. Opponents from both the United States and the Soviet Union argued that the system would serve only to further destabilize the situation as it would neutralize the Soviet Union's ICBMs, thus making the Soviet Union vulnerable to attack with no way to retaliate (Cochran et al. 1995). The Soviet Union might launch a preemptive attack in order to prevent the SDI system from coming online, which would in turn force the United States to react; the ensuing escalation of force would create the very situation that the SDI system was supposed to stop-- nuclear armageddon.

The United States publicly announced that it was going to create this system, thereby allowing the Soviet Union the chance to disrupt the work with a preemptive attack. On the surface this could be construed as a foolish move by allowing one's enemy to know that one is going to achieve a technological advantage over them, but upon further investigation it could be considered a brilliant gamble.

By announcing one country is going to outclass their enemy technologically, that country is forced to make one of three choices: they can either watch their hugely expensive weapons investment and defensive system become obsolete, leaving them vulnerable to attack and weakening their ability to intimidate or force their point of view, they can attack preemptively in order to prevent the weapon system from coming online, an act which will probably lead to their destruction too, or they can invest huge sums of energy and time in developing a counter to the weapon (Craig and Logevall 2009).

The third choice is the one the Soviet Union took. It could not allow the signal of the United States achieving weapons superiority to be sent to the rest of the world. It began spending millions of dollars on ways to defeat the US SDI system-millions of dollars that it could not afford to keep spending on weapons research. The United States also began spending billions on research for the SDI project. The more money the United States spent on the SDI specifically and weapons in general, forced the Soviet Union to spend more in an attempt to keep up. (Craig and Logevall 2009; Snyder 1995).

Yet many weapons experts maintain that SDI was nothing but a fantasy. Most of the technology needed to make such a system feasible was only in its infancy during the 1980s and many thought it would take decades before even the most basic goals of the program could be achieved (Snyder 1995).

The United States was signaling to the Soviet Union that it would render its nuclear weapons useless and spent billions convincing them that it could do it, yet no operational version of SDI was ever created. It was signal of technological superiority that was costly but inherently false, as even today being able to shoot down a small nuclear warhead hurtling towards the earth from the upper atmosphere at a few miles per second is a spotty proposition at best.

Conclusion

Signaling theory has been applied to conflict situations in the past when dealing with hunter-gatherer groups (Roscoe 2009), and has also been applied to the monuments constructed by prehistoric cultures (Trigger 1990). In this paper I have shown how signaling theory can be applied to modern nation states and conflicts between them. The use of signaling theory can help with the understanding of complex political situations by simplifying the reasons why a nation may act a certain way or engage in a certain activity, therefore making it easier to understand. However, when applying signaling theory to these situations, one must remember that diplomatic relations between two countries are extremely complex and caution must be used before simplifying a situation to the point of inanity.

In the case of the Soviet Union the expense of maintaining and building nuclear weapons and other military assets, coupled with poor economic policies drove them into bankruptcy (Craig and Logvall 2009; Snyder 1995). The desire of the Soviet Union's government to maintain the external and internal signal of equal, if not superior, strength compared with the United States drove their country to collapse. The Soviet Union was able to maintain the quality of their signal of strength until the end despite its economic difficulties. The quality of this signal was shown when the United States was taken by surprise by the Soviet Union's collapse, as it believed that the Soviet Union was still a strong, viable nation. This signal of strength sent by the Soviet Union is another example of a costly signal being false.

The signaling between the United States and the Soviet Union has also left a physical signature that will enter the archaeological record as time goes by. The massive missile silo complexes built by both nations, of steel and reinforced concrete, were built to withstand nuclear weapon blasts. The same technology that would have allowed the bunkers and silos to survive a nuclear blast has also made them too expensive to destroy (Schofield 2009). Recent nuclear missile reduction treaties have lessened the need for so many silos and so the missiles have been removed and the missile doors left open so Russian satellites can confirm that they are empty. Some of the silos and

bunkers have been sold to civilians as apocalypse proof homes, and to corporations as secure storage for server farms. The rest are empty, too expensive to destroy. These silos will last for decades, perhaps hundreds of years, silent concrete testaments to a time when two nations had the capacity to destroy the world several times over.

The Berlin Wall has also left a mark in the material record. Parts of the wall are preserved in order for future generations to see how the wall was during the Cold War. Also many fragments of the wall were taken as souvenirs by both East and West Germans. It could be that these fragments will be passed on through the generations as mementos of a different time.

The propaganda efforts of both nations will also leave a material record (Belmonte 2008). Recordings of the radio and television messages still exist and efforts should be made to ensure they are preserved, along with any paper records that may still exist. And as classified information becomes unclassified in both nations, efforts should be made to preserve those records as well. The vast radio towers and satellites used in the propaganda efforts will most likely not leave a large archaeological signature as radio towers require heavy maintenance in order to even stay standing, and unless they are adapted to serve other purposes they will most likely be deconstructed, the materials used in their construction recycled (Snyder 1995). Satellites are equally as fragile, as their fuel supplies run out and newer technology comes on line, the satellites of the Cold War will fall back into the atmosphere (burning up as they do), leaving nothing behind (Snyder 1995).

Any physical remnants of the signals discussed in this paper should be seriously considered for preservation as their preservation will give future archaeologists an opportunity to answer new questions that may arise about how powerful nations signal to each other, and also to allow current archaeologists to educate the public and answer their own questions about how nations prepared for war (Schofield 2009).

Signaling theory can be applied to conflicts between modern nation states and it can help with our understanding of the conflicts and why certain actions were taken by certain groups in the past. Nation-states, like individuals, signal to both people inside and outside of their borders, to show their fitness in order achieve their goals.

For future research, an analysis of the signals sent between the Soviet Union and the United States-both direct communications and defensive structures built in response to perceived threats-could help to identify a signature of a nation or group that feels threatened. Also, the application of signaling theory to this conflict has shown that costly signals can be faked, as was shown with the supposed development of the Strategic

Defense Initiative or the Soviet Union's signals of strength and stability near its collapse. This signature could be used to analyze the material remains in the archaeological record in order to determine if a group was preparing for war or existed with real or imagined threats, and help us to understand what was happening in the past.

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