Droned In: The Acquisition and Motivational Differences Between Autocracies and Democracies

Pete R. Hagan
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Pete R. Hagan
Thesis Advisor: Dr. Bryan Early

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Abstract

Drone technology has become a revolutionary development in warfare. They allow a nation to conduct offensive operations far from any soldier or base. As such, they have spread rapidly over the past few decades to incorporate many of the world’s foremost military powers. This thesis sought to discover the motivations and methods of acquisition of drones between different regime types. The research found a correlation between autocracies and democracies importing drones from similarly aligned states. Secondly, autocracies were found to be motivated to acquire drones due to a foreign supply excess and democracies were motivated by a domestic desire for them. Lastly, it was found that autocratic states seek prestige and status by acquiring drones, and that democracies sought to reduce domestic casualties and collateral damage in their acquisition of drones. This research can hopefully assist predictions on nations that will acquire drones and how different regime types will go about proliferation.
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Introduction

Within the past few decades, new domains of warfare have emerged that have not fully been studied or understood. Drone warfare is one of these such domains. With origins dating back centuries, uninhabited aerial vehicles (UAVs) have been used in a myriad of non-tactical ways by militaries. Armed drones in their current form began to emerge in the 1990s, with the American MQ-1 Predator drone as the pioneer of armed drones when Hellfire missiles became a standard payload. After the Global War on Terror, armed UAVs began to emerge as an integral aspect of targeting and proved their reliability and usefulness on the battlefield. More and more states are creating drone programs either domestically, or through procurement from another nation. After the early 2010s, many more states began to establish armed UAVs, especially in Europe and the Middle East. As different states seek to acquire drones, there deserves to be research into how and why these states seek UAVs. Why do different regime types seek drones and how do they go about getting them? This thesis will seek to answer how and why autocracies and democracies pursue and acquire drones, and what some of their aims are when they do have UAVs. It will compare and contrast different motivations, methods, and aims of drone proliferation between autocracies and democracies. Through careful analysis and research of scholarly research, data and statistics, this paper seeks to discover the differences between these two regime types in order to predict future proliferation.

With the established current research and the states that can be used for study, hypotheses about the differences between autocratic and democratic forms of government surrounding the motivation and acquisition of armed UAVs can be established. There are three main hypotheses that can be proposed before research into specific states.
First, states are more likely to sell or acquire drones from states with similar regime types as their own. A democracy would be likely to trade UAVs with other democratic governments, in the same vein that autocracies would be more likely to trade drones with autocracies. States that are sympathetic to one another and their system of government are more likely to work with one another than to trade with a mixed regime or anocracy.

Second, autocratic states are more likely to acquire drones because of a supply surplus from autocratically friendly states while democratic states are more likely to be motivated internally for the acquisition of drones. This hypothesis rests on supply and demand economics, with autocratic state’s motivations identifying with the supply side, and the democratic state’s motivations identifying with the demand side.

Lastly, autocratic states seek to gain international prestige by acquiring drones, however, democratic states seek to reduce military losses because they are more risk averse countries. Autocratic states will seek to gain status and be powerful in comparison with other nations on the international system by acquiring armed drones while democratic states will focus on appeasing the citizen population by reducing the costs of wars that they wage in acquiring and potentially using UAVs.

These three hypotheses can properly analyze and contrast the two different regime types in their quest for armed UAVs. By using Polity scores, there can be a clear quantitative designation for what counts as a democracy, autocracy, or mixed regime. In doing so, this paper can come close to an objective viewing of these states to determine how to label their government structures. Furthermore, by using two diametrically opposed states, this paper seeks to demonstrate the differences in these states’ drone acquisition strategies and motivations. At
its core, this paper seeks to demonstrate that the defining factor separating the actions of these two states is their government structure.

This thesis found, with empirical evidence, that there is a correlation between state regime and importation of UAVs. States that have friendly regime types, like autocracy to autocracy, are correlated with importing drones from those similar states. There is also evidence supporting the hypothesis that autocracies are motivated to acquire drones from an external supply of UAVs and democracies are more so motivated by an internal desire. Autocracies will take advantage of an opportunity to purchase and import armed drones, while democracies will wait until they see a need and their domestic government pushes for the importance of drones. Lastly, autocracies were found to acquire and proliferate UAVs due to a need to increase status on the international stage while democracies are more inclined to reduce the casualties of both civilians and their own military. The implications of these findings can impact how political scientists predict the methods that will be used if a state is seeking to establish an armed drone program. For a state that wants to acquire drones, using these findings can determine different policies or other means of preventing further proliferation of these technologies. Determining which states are being motivated to acquire armed drones can lead to plans on how to prevent further proliferation and spread of UAVs.

For this thesis, armed drones of NATO Class III, medium altitude long endurance (MALE) and high altitude long endurance (HALE) armed drones will be used. Class III drones are expensive, difficult to acquire, and tactically useful and as such will be the focus of this paper. For purposes of simplicity, the terms UAVs and drones will be used interchangeably to describe these systems. These types of drones are far more salient and important on the international system as they have the capabilities to make a significant tactical impact through
the elimination of individual enemy combatants, carrying weapons of mass destruction and can serve as an unseen presence on the battlefield. Single usage, kamikaze drones as well as reconnaissance drones will be omitted due to the commercial and civilian availability, vast expanse internationally, and ease of creation. Smaller, non-combat oriented drones do not have the same tactical use and do not serve to project any technological advancement or military prowess. This paper will seek to answer the difference in methods and motivations for the horizontal proliferation of these classes of UAVs between democracies and autocracies.

Background

Up until 2014, only 4 states had armed drones (Gettinger, 2019). The United States, Israel, the United Kingdom, and China were the states that had drones of this caliber. However, by 2015, Iran, Iraq, Nigeria, Pakistan and UAE, all had their own drones, either through internal development or through importation. By 2020, 12 more states had obtained UAVs through similar methods. Current research points to the introduction of China in 2011 as a large contributor to the expansion in drone proliferation (Horowitz and Schwartz and Fuhrmann, 2020). Furthermore, the expansion of drones after 2020 has been partially attributed to Turkey exporting drones as a way to increase their status (Soyaltin-Colella and Demiryol, 2023). Some research attributes the rise of drones across the world to domestic production and permissive exportation policies (Woodhams, 2018). Exportation controls of this nature include the Missile Technology Control Regime (MTCR), which is a non-binding agreement for member states not to export any technology that can transport WMDs or 500kg payloads over 300km, including cruise missiles and UAVs. Notable states missing from membership are China and Iran, two known exporters. Others argue that the rise of drones is due to more security related concerns
(Fuhrmann and Horowitz, 2017). These scholars cite that the presence of territorial disputes as well as terrorist threats increase the likelihood of seeking drones. Earlier research into the diffusion of drones into the international system suggested that UAVs are unlikely to spread across the world, (Gilli and Gilli, 2016) however, it has been proven to be empirically false due to the number of states that have acquired drones after it had been published. This large amount of research can contribute to explaining the vast expansion of drones in the international system. However, these papers do not explain the difference in democracies and autocracies. Scholars such as Fuhrmann and Horowitz have established that states on either end of the autocratic-democratic spectrum are more inclined to obtain UAVs, but not that one end is more likely to be prompted by security threats and another by supply-side availability, for example.

This thesis seeks to answer how autocracies and democracies differ in their motivations to acquire drones. There can be several other motivations that are inherent for democracies and autocracies. Current scholarly work has sufficiently answered that states that are autocracies and democracies are more likely to acquire advanced military technology including UAVs than other mixed regimes (Horowitz and Schwartz and Fuhrmann, 2020; Fuhrmann and Horowitz, 2017; Kaag and Kreps 2013, Early et. al, 2022). In addition, some nations increase arms proliferation and military exercises as a matter of gaining status with other states, (Fuhrmann and Horowitz, 2017) Furthermore, other smaller nations are likely to try to gain prestige internationally by proliferating drone programs. Research also suggests that democracies and autocracies who are more inclined to face terrorist and security threats are more likely to seek and acquire UAVs (Horowitz and Schwartz and Fuhrmann, 2020). Current academic work contributes to the theory that democracies and autocracies are both more likely to obtain UAVs than anocracies,
especially if they face some security threats. This paper will try to separate the motivations between democracies and autocracies.

Democracies have always been risk averse to putting their citizen populace in danger of conflict. Democracies fear losses and are more risk averse than autocracies because of the adverse side effects of waning public support for a high cost war (Maoz and Russett 1993, Freedman, 2006). However, current research (Demmers and Gould, 2020) suggests that this risk aversion in a democracy does not lead to less conflict, rather, it leads to conflict that simply reduces the likelihood of host nation soldier casualties. Demmers and Gould note that with the advent of drones, democracies are not less likely to get involved in conflict; democracies are more likely to engage the enemy because there is no risk of citizen casualties and less accountability towards the government. These pieces of scholarly work contribute greatly to the academic foundation about drones. They all have contributed to creating a case that democracies are inherently risk averse to losing in a high cost war and are more likely to use drones in warfare. Together, the academic consensus on democracies and drones are that democracies are motivated to procure UAVs because of security threats and risk aversion.

Current research also points to autocracies seeking prestige and status in the international system through arms proliferation and UAV production (Fuhrmann and Horowitz, 2017). Autocracies have been cited as being able to obtain drones more recently, with the advent of China beginning to export drones and being willing to export towards autocracies over the globe (Horowitz and Schwartz and Fuhrmann, 2020). There has also been research into how states with “personalistic” regimes headed by an authoritarian or a strong man are more prone to proliferate nuclear weapons (Way and Weeks, 2014), this can be attributed to less institutional restraints and more regime insecurity and as such, has a practical application to drones as
well. In addition, some research points towards status building of states that increase drone production and drone exportation. (Soyaltin-Colella and Demiryol, 2023) This scholarly work also contributes the increase of drones to autocratic states because of the supply side abundance from an authoritarian aligned state seeking prestige. This coincides with other research (Horowitz and Schwartz and Fuhrmann 2020) on how status seeking states are more likely to try to seek drones, just as how status seeking states have exported drones to gain more prestige on the international system. With all of these scholarly pieces in conjunction with one another, there are some trends that current literature is tending towards. This body of work contributes to the assertion that autocracies are motivated to acquire UAVs if they have a security threat posed against them, if the regime is led by a “personalistic” leader, if they seek status internationally, and if there is a supply side abundance, especially if there are less institutional constraints to their exportation.

There is a need for more research into drones and their proliferation motivations and methods. While this thesis seeks to explain how different regime types are motivated to acquire UAVs and how they go about getting them, there is still a greater need for scholarship into how expansive UAVs will become in the future. In trying to explain how different regimes get drones, this paper will attempt to puzzle together methods that future democracies and autocracies may try to utilize. With additional research into how different regimes acquire drones, then more concrete assertions can be made about proliferation leading to a better understanding about this new domain of warfare.
History of Drones

The beginnings of UAVs originate back to the 19th century with the usage of balloons for combat purposes. Hot air balloons were used in several conflicts as a means of collecting intelligence and surveilling enemy lines. The 20th century brought the first pioneer to the modern UAV, the De Havilland DH.82B Queen Bee, created in 1935. The Queen Bee was a modified version of the Tiger Moth, an older plane model that could be refitted with a wooden fuselage which made it cheaper and lighter. The Queen Bee was a radio controlled unoccupied aircraft used for anti-aircraft target practice by the RAF (de Havilland Aircraft Museum, 2023). The Queen Bee never saw combat, as its only practical use was for gunnery training, however, it demonstrated the importance of uninhabited aircraft for future decades. Furthermore, the Queen Bee is a part of the etymological origin of the term, “drone” to describe an unmanned aerial vehicle.

The next revolutionary development in UAVs came in 1973, in Israel. The IDF was in need of means of surveillance as a result of the Yom Kippur War. The result was a UAV created by Tadiran Electronic Systems of Israel that the IDF designated as “Mastiff”. The Mastiff was an expendable aerial platform that provided live video coverage of the area that it was surveilling (Tucker, 2008). The Mastiff gained notoriety and combat experience in the Lebanon War, or Operation Peace for Galilee, beginning in 1982. The Mastiff allowed for live, transmittable intelligence of Hezbollah positions and Surface-to-Air Missile sites, leading to a substantial military advantage for the IDF. In the Battle of Jezzine, in 1982, Mastiff drones provided critical intelligence on the movement of Syrian soldiers, leading to their decisive elimination from Israeli fighter jets (Schiff & Yaari, 1985). From then on, governments recognized the need to have UAVs to provide constant intelligence.
Another major development that demonstrated the need for modern states to have UAVs occurred in 2001. After 9/11, the US began operations into Afghanistan almost immediately, targeting Al-Qaeda and Taliban leaders alike. One such target was Mohammed Omar, the Supreme Commander of the Taliban. On October 7th, the first lethal drone strike was conducted by an MQ-1 Predator drone with an AGM-114 Hellfire Missile (White, 2014). While the strike did not kill Omar, it did usher in a new age of warfare, one defined by strikes from aircraft, unseen by the human eye, piloted from thousands of miles away. During the War on Terror, there have been thousands of drone strikes, it has become the hallmark of combating terrorism.

UAVs have been a proven useful weapon for governments in the fight against terrorism. Despite many moral and ethical debates, dozens of governments have made the choice to acquire combat oriented drones of this type. As such, research has gone into why countries will choose to seek out weapons of this type. However, not all nations act in the same way, a democracy and an autocracy act very differently when faced with similar problems. In this case, there needs to be research into the comparison of how different governmental structures go about acquiring UAVs and for what purposes.

**Example Nations**

This paper seeks to answer why and how democracies and autocracies seek and acquire armed drones. In order to do this, two case studies must be used to test any hypotheses. The first example, for the democracy, is France. France has a 9 polity score, affirming it directly as a strong democratic state. France is a semi-presidential republic, with Emmanuel Macron as chief executive, that also consists of a bicameral legislature with a parliament led by the Prime Minister as well. The President is elected by majority vote, potentially after runoff
elections. The National Assembly, the lower house in the bicameral legislature, is also elected by popular vote; the Senate is elected through an electoral college of local officials voting on the behalf of the people. Lastly, France has a strong judiciary that is used as an additional check on power for the executive and legislature, making France a strong democracy with institutional separation of power with sovereignty resting in the hands of the citizen body.

Furthermore, France has a GDP of $3.05 trillion, ranked 7th globally (International Monetary Fund, 2023), and had a planned defense record of $295 billion for 2019-2025 (French Embassy, 2020) for an average of approximately $49 billion yearly. France first acquired UAVs from the United States when they purchased four RQ-5 Hunter UAVs, which have an ISR (Intelligence, Surveillance and Reconnaissance) mission set and not weaponized. France then purchased six MQ-9 Reaper UAVs, which are multi-use and can be armed, from the American company, General Atomics. In 2019, the Defense Minister Florence Parly announced the French government was beginning to arm their 6 Reapers to become the sixteenth state to have armed UAVs (France 24, 2017). As such, France is a good subject to study for this paper. They are not one of the original proliferators of armed drones, yet it has not been recent enough in their acquisition that it cannot be studied. France is a strong, wealthy, democracy with modern infrastructure.

The second nation that should be studied, counter to the democracy, is Saudi Arabia. Saudi Arabia has a -10 polity score, affirming it as a strong autocracy. The Kingdom of Saudi Arabia is an absolute monarchy, with King Salman as regent, but his son, the Crown Prince Mohammed bin Salman, is seen as de facto ruler of the nation. The nation's legal system is based around the Quranic Sharia Law; they lack an elected legislative body, with the King being the sole head of government and the state. There is a consultative legislative body outside
of the royal family appointed by the King called the Majlis Al-Shura. They can, as cited from the Saudi Embassy, “Originally restricted to discussion of regulations and issues of national and public interest, the mandate of Majlis Al-Shura was broadened in 2004 to include proposing new legislation and amending existing laws without prior submission to the King.” (The Embassy of the Kingdom of Saudi Arabia, 2023) The Saudi government is an autocracy, as it is led by a monarch, lacks checks on power, and has no political representation of the citizen body.

Saudi Arabia also boasts a GDP of $1.07 trillion, ranked 19th globally, and has had defense budgets totaling ~$208.8 billion from 2019-2022 (Ministry of Finance, 2022). This defense budget is averaging approximately $52.2 billion yearly, comparable to the French budget of approximately $49 billion yearly. For the Saudi Arabian drone program, they purchased two CH-4 and up to five Wing Loong MALE UAVs from China in 2014, to arrive in Saudi Arabia in 2016 (Frew, 2018). Later, in 2017, they reportedly purchased three hundred Wing Loong drones, in addition to opening up a manufacturing plant to produce Chinese drones on Saudi Arabian soil (Frew, 2018). Saudi Arabia is a good subject for study as it is a wealthy autocracy with comparable development with France, as well as a strong military UAV program.

Drone Specifications

Before going into specifics about the states motivations and acquisition styles surrounding these UAVs, the technical and combat abilities of these drones deserves to be mentioned. The main two drones that will be addressed are the MQ-9 Reaper, from the United States and the Wing Loong I and Wing Loong II, from China. The MQ-9 Reaper was developed in 2001 and was meant to serve a multi-mission purpose, with ISR and direct action capabilities. It has a range of 1,150 miles with a maximum operating altitude of 50,000 feet. As
for arms, the Reaper can carry a multitude of weaponry including AGM-114 Hellfire missiles, a
laser guided anti-personnel and armor missile, GBU-12, GBU-38, GBU-49 and, GBU-54 which
are guided bombs. The Reaper can carry up to 3,750 pounds of these munitions, and up to 8
armaments total. The final cost of one of these units alone is approximately $14 million. The
Wing Loong I was first introduced in 2011 as China’s first development into the world of armed
UAVs while the Wing Loong II was introduced in 2017 as a direct counterpart of the
Reaper. The Wing Loong I and II has both ISR and direct targeting, similar to the
Reaper. Unlike the Reaper, the Wing Loong I has a range of 2,500 miles and a maximum
altitude of only 16,000 feet while the later version had a range of 932 miles and a maximum
altitude of approximately 30,000 feet. As for payload, the Wing Loong I can carry up to 440
pounds worth of armaments while the II can hold up to 12 missiles or bombs weighing up to
1058 pounds. A major draw for the Wing Loong class of drones is the price, estimated to be
around only $1-2 million.

**Importation and Regime Type**

Beginning with the importation of drones and regime type, Saudi Arabia had acquired
armed drones in 2016, and unlike France, had acquired armed Wing Loong I drones from China
in 2016. According to the hypothesis, Saudi Arabia should have acquired drones from a
similarly friendly autocratic state. China has a polity score of -7, designating it as an autocracy,
similar to Saudi Arabia. However, a simple correlation between China’s exportation of drones to
Saudi Arabia does not fully suffice to prove or disprove the hypothesis. It serves to go into why
the Saudi government decided to buy drones from China rather than from another source. When
they originally bought their drones from China, only 4 states had indigenously produced armed
drones to be exported: United States, Israel, China, and Iran. Saudi Arabia had the choice to attempt to purchase armed drones from any of these states, however, they bought them from China. Much of the justification for this move towards China lies in the policy decisions of the United States.

The United States makes policy decisions to be restrictive with who they send arms to, as well as trying to prevent any third party end-state usage. The US implements a formal Conventional Arms Treaty (CAT) Policy, which intends to limit the dangers that US arms pose when being used by other states. Part of the US CAT Policy is so to, “Prevent arms transfers that risk facilitating or otherwise contributing to violations of human rights or international humanitarian law” (White House Briefing Room, 2023) The US is very risk averse in who receives weaponry from them. Furthermore, the US is a party to many international treaties that limit who can receive weaponry. One of these such bodies is the Missile Technology Control Regime (MTCR). This body is dedicated to the limitations in proliferation of missiles that have a greater than 300 km and 500 kg payload, and some UAVs exceed both, and as such are party to the MTCR. The MTCR 2017 annex handbook states,

The purpose of these Guidelines is to limit the risks of proliferation of weapons of mass destruction … by controlling transfers that could make a contribution to delivery systems… for such weapons. The Guidelines are also intended to limit the risk of controlled items and their technology falling into the hands of terrorist groups and individuals… These Guidelines, including the attached Annex, form the basis for controlling transfers to any destination beyond the Government’s jurisdiction or control of all delivery systems (other than manned aircraft) capable of delivering weapons of mass destruction, and of equipment and technology relevant to missiles whose
performance in terms of payload and range exceeds stated parameters. Restraint will be exercised in the consideration of all transfers of items within the Annex…

The MTCR is one of many institutions that serves to prevent the vast expansion of these military technologies to any potentially bad or maleficent actors. A key development in the application of this to the Saudi Arabian acquisition of drones is that of the many countries who are members of the MTCR, China and Saudi Arabia are not. On top of this, the Wassenaar Agreement, which is meant to further aims of, “promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilizing accumulations.” (The Wassenaar Arrangement - About Us, 2023) The Wassenaar Agreement specifically covers the exportation of conventional weaponry, and dual-use technology seeking to limit the unrestrained expansion of dangerous technology in order to prevent unintended end-state usages. Once more, neither China nor Saudi Arabia have agreed to these measures.

Saudi Arabia sought the acquisition of armed drones and chose to import them from China. The hypothesis states that autocracies are far more likely to acquire UAVs from similarly autocratic states. As a state early on in the proliferation of UAVs, Saudi Arabia did not have many options as to where they could import from. However, Saudi Arabia still purchased drones from an autocratic state. This could be attributed to the lack of institutional restraints that many democracies such as the US are a party to, in order to prevent the misuse of these technologies. Many autocracies are not constrained by these institutions and, as such, are viable candidates to quickly acquire drones without difficulty or delay. However, specifically in the case study, Saudi Arabia chose China from a very small group. Out of the states that were producing armed drones, Saudi Arabia has incredibly strained relations with two of the options, Israel and Iran, due to religious differences between the states. As such, there appears to be a
correlation between autocracies choosing to proliferate through one another, however, this hypothesis cannot be absolutely proven and must remain only a possibility with the research done in this paper.

So, continuing with the first hypothesis, states are more inclined to trade armed UAVs with states with similar regime types. This paper hypothesizes that democracies are more likely to try to acquire drones from other democracies and autocracies are more likely to acquire drones from other autocracies. So beginning with the democratic regimes, France began their armed drone program in 2019. Unlike other states in purchasing armed drones, France purchased unarmed drones and chose to arm them at a later date. France initially bought RQ-5 Hunter drones in 1995, followed by homegrown EADS Harfang drones, then France purchased MQ-9 Reapers from the US before arming them. Therein lies the difficulty of using such a case study in an attempt to prove this hypothesis. In analysis of the different states who do have armed UAVs, a stark trend begins to emerge.

Out of the states who currently have armed drones, a minority of them have acquired them from democracies. The minority of nations acquired them from democracies while the remaining states either indigenously produced them, or they had imported them from an autocracy or a mixed regime. It serves to ask why there is not a stronger democratic presence in drone proliferation. The answer still lies in the export policies of these drone producing democracies. There are two dominant indigenously producing democracies: the United States and Israel. The United States is a member of the MTCR, the Wassenaar Arrangement, and has a strict conventional arms exportation policy to prevent any misuse of American technologies. In a 2022 article on how democracies and autocracies have different likelihoods of proliferation, it was said, “US drone export policy has, unintentionally, put democratic countries at a
disadvantage since most democracies are unwilling or unable to purchase from China.” (Horowitz, Schwartz & Fuhrmann, 2022). The US has a dedication to drone export policies that is difficult to abide by democratic drone seeking states, and as such, limit them to either not acquiring drones, or getting them from other sources, such as mixed regimes like Turkey.

Israel, on the other hand, is not a party to either institution, however, they have not been prolific in the exportation of armed drones. They have exported an exceptional amount of unarmed UAVs, 41% of the world’s share from 2001-2011, however, only a small few nations have Israeli armed drones, as they too are much more selective with who they export to due to their international status. Altogether, the export policies of democracies have made it difficult for all states to acquire UAVs, even to similarly democratic states.

However, before 2020, nine democracies had confirmed acquisition of drones from another democracy, not including states that simply had an armed UAV flight in their airspace. This contrasts with the four democratic UAV importers that acquired them from other regime types before 2020 (Gettinger, 2019). As such, it seems more likely that democratic states are more inclined to import drones from democracies before 2020. However, after 2020, Turkey entered the drone market and began exporting massively to a myriad of states (Soyaltin-Colella & Demiryol, 2023). Autocracies, democracies, and mixed regimes alike began importing drones from this rising power. Turkey has a -4 polity score, indicating that it is a mixed regime, meaning that it cannot help prove either hypothesis. So, once again there is a correlation between democracies acquiring drones from other democracies, but it cannot be absolutely proven because of the prevalence of other regime structures exporting drones to democracies as well. It is apparent that democracies seek to trade drones with other democracies, however, with
the policies that democracies adopt in the exportation of drones, it limits importing nations, resulting in them importing from other regime types.

**Motivations**

The second hypothesis that this thesis seeks to answer why states seek to get drones from the states that they do. This paper seeks to evaluate if autocracies acquire drones because there is an external supply and if democracies acquire drones because of an internal motivational driver. Beginning with democratic states, the hypothesis dictates that the democratic state selected, France, should be driven by internal motivational factors to acquire armed drones over external supply factors. Unlike many other states, France acquired unarmed drones before arming them with weaponry at a later date. However, this does not mean that France’s decision to arm their drones could not be driven by internal or external factors. Here, we must look at France’s government to determine what drove them to arm their UAVs.

France armed their MQ-9 Reapers in 2019 after using an unarmed version of the UAV for many years for ISR purposes. The debate over whether the country should arm their drones did not begin in 2019, though. On May 23rd, 2017, the French Senate’s Committee on Foreign Affairs, Defense, and Armed Forces issued a report on unarmed and armed UAVs entitled, “Observation drones and armed drones: a sovereignty issue”, where they argue on the arming of the UAVs they currently have. The main points of argumentation, written by Senators Perrin, Roger, Bockel, and Vall, is that many of their contemporary countries have armed drones such as Italy and Germany. Their drones are already involved in airstrike missions using Hellfire and GBU ordnance meaning that adding them could streamline targeting missions, and using MALE drones would make French forces more efficient and optimize combat aviation.
abilities. Furthermore, after defending the legality of armed drones in combat, they argue that it is a more humanitarian use of force as it can attempt to limit civilian casualties, “Improving the capacity to identify targets and discriminate between civilians and combatants, in order to reduce the risks for civilian populations, is a necessity.” (Perrin et al., 2017). In addition to this, the Committee cited a further protection of French soldiers, “...by making it possible to visualize the maneuver and anticipate the threat or enemy intention, the drone provides enhanced protection for troops on the ground.” In the end of the report, the Committee recommends that France arm the drones in their current arsenal by stating, “Drone are already extremely present in the decision-making loop at the tactical level, providing a crucial contribution to situational awareness and carrying out weapons guidance. Arming drones to make French forces more reactive and more efficient would constitute an additional logical step, in order to take full advantage of their potential.” (Perrin et al., 2017). France inevitably did adopt this exact policy in 2019, by arming their UAVs. As a democracy, France was focused on the internal political motivations including improving their internal military and to prevent additional unnecessary casualties on the battlefield. This supports the initial hypothesis, as France was driven to arm their UAVs due to internal motivations rather than acquiring armed UAVs because of a market surplus of armed drones.

For the autocratic side of the second hypothesis, Saudi Arabia’s motivations in acquiring armed drones should be analyzed. According to the hypothesis, an autocratic state should seek to acquire drones due to an external surplus of UAVs. Saudi Arabia’s armed UAV program began in 2016 with the acquisition of several Wing Loong drones purchased from China. China, a strong autocracy with a polity score of -7, is the largest drone exporter in the world. Saudi Arabia’s decision to acquire drones from China, an autocracy purchasing from a similar
autocracy, indicates states of this regime type are willing to trade UAVs. However, it serves to look at reasons why Saudi Arabia was incentivized to get UAVs from China.

China’s exportation of drones practically revolutionized nations’ ability to acquire drones when it entered the drone market in 2011. In an article, Michael Horowitz, Joshua A. Schwartz, and Matthew Fuhrmann wrote, “Specifically, China’s development of an armed drone in 2011 and its willingness to export this technology asymmetrically eased supply-side constraints for non-democracies.” (Horowitz, Schwartz & Fuhrmann, 2022). Their article analyzes how different states are more likely to proliferate drones than other states. In it, they have a focus on China and their introduction to the drone world. They argue that when China began exporting drones, it created a supply excess leading to many autocratic states acquiring drones. Once China entered the drone market, “…non-democracies became more likely to pursue and possess than democracies, mostly because China entered the armed drone export market while the US was restricted by the MTCR.” (Horowitz, Schwartz & Fuhrmann, 2022) Furthermore, in an interview, Cornell Professor Sarah Kreps, one of the world’s foremost drone researchers, said, “Saudi Arabia and smaller countries like the UAE are trying to get their hands on whatever they can, and the US has pretty restrictive export policies,” (Brandom, 2014) Saudi Arabia is seeking out nations that will freely export their drones to their nation; they chose to find a nation that is unrestricted by institutions that is willing to sell drones to autocracies.

As for why an autocracy like Saudi Arabia choose to turn to states like China, “Simply put, China’s weaponized drones are on the market when others aren’t… In addition to being able to sell to any willing buyer, the Chinese also offer the lowest prices on the market.” (Turak, 2019). In this instance, Saudi Arabia entered the drone market a few years after China's introduction and proceeded to acquire Wing Loong UAVs due to the preponderance of Chinese
drones. Because China is unrestricted by international institutions, they were available to export drones to any autocracies that they saw fit. In accordance with the hypothesis, Saudi Arabia acquired their drones because another autocratic friendly regime that had a supply of drones was willing to export to them.

**Goals after Acquisition**

The final hypothesis rests on the claim that democracies are more inclined to use UAVs to prevent domestic military deaths and autocracies will use them as a tool to increase status and demonstrate power on the international stage. For France, their transparency surrounding their motivations and efforts for acquiring and arming their drones creates an openness on why they need armed drones. In the French Senate subcommittee report, they state that, “The first advantage that the use of an armed drone would offer to accomplish a bombing mission similar to that of a combat plane or an attack helicopter: the absence of risk for the remote pilot.” (Perrin et al., 2017). The French government’s own justification for supplying arms to their drones is that they can reduce their own domestic casualties for French pilots. As a democracy, France is more prone to be risk averse than other regime styles.

Democracies tend to avoid conflict and are more risk averse, “Due to the complexity of the democratic process and the requirement of securing a broad base of support for risky policies, democratic leaders are reluctant to wage wars, except in cases wherein war seems a necessity or when the war aims are seen as justifying the mobilization costs.” (Maoz, Russet, 1993). Democracies are more reluctant to risk the lives of their citizen body, and as such, a part of France’s justification is that they need to reduce as many French casualties as possible.
They conclude the report, after deciding to suggest the arming of UAVs, with, “Being able to choose the best time to strike can also help reduce the risk of collateral damage. In addition, remote piloting will help preserve the lives of combat aircraft pilots for certain particularly dangerous missions.” (Perrin et al., 2017). France’s Senate reinforced their justification for supporting the arming of their UAVs by arguing that they will reduce casualties and collateral damage. This coincides with a democratic incentive to be more risk averse than autocracies. This supports the democratic side of the hypothesis that those states are more inclined to justify their armed drones by citing the reduction in casualties.

Finally, for the justifications of acquiring armed drones for autocracies, the hypothesis stood that an autocracy would seek to gain status and power in relation to the international system. In the case of Saudi Arabia, there are stark differences in ascertaining exact justifications since it is a monarchy; the King of Saudi Arabia does not have the checks on power that democracies have and as such does not have to announce decisions or motivations. Saudi Arabia has attempted to arrive at the forefront of technology, as well as military power. Saudi Arabia has attempted to bring many foreign investors and interests into the country. The potential of Saudi Arabia seeking status with other great powers comes with the reality of bringing in those great powers' interests. However, in a more recent statement from the current Minister of Defense, Khalid bin Salman, explained why Saudi Arabia had chosen to purchase drones from Turkey, “This is aimed at raising the readiness of the armed forces, and strengthening the Kingdom’s defense and manufacturing capabilities,” (bin Salman, @kbsalsaud, 2023). From the Minister of Defense, the son of King Salman, acquiring additional armed drones was to strengthen the military power of Saudi Arabia. However, the Royal United Services Institute released a report on armed drones within the Middle East, where they analyze
the strength and disposition of the armed UAVs in the region. In it, they state of the Saudi drone program, “Given the power and funding structures within the Kingdom, successfully securing funds and procurement authority for drones is likely to be seen as a symbol of status within the Saudi armed forces.” (Tabrizi, Bronk, 2018). The RUSI argues that the Saudi Arabian government uses the acquisition of armed drones as a way to increase status, which coincides with the initial hypothesis of autocracies seeking an increase of status.

Conclusion

Coming together, the proliferation of drones is an ever-changing, contemporary issue that deserves more scholastic attention as drones become prevalent on the international stage. This paper sought to answer how different regime types act in the motivations and acquisition of armed UAVs. This paper hypothesized that democracies and autocracies would acquire drones from similarly aligned regimes; that autocratic states are more likely to acquire drones because of a supply surplus from autocratically-friendly and that democratic states are more likely to be motivated internally for the acquisition of drones. Lastly, that autocratic states seek to gain international prestige by acquiring drones and that democratic states seek to reduce military losses because they are more risk averse countries. Through the analysis of an autocracy and a democracy, Saudi Arabia and France respectively, this paper demonstrated the differences in these programs.

There was a correlation between the acquisition of UAVs between similarly aligned states, however due to the limitation of the number of states openly exporting UAVs, it can only be seen as a likely option to be studied in future research. For the second hypothesis, autocracies were found to be motivated by a supply side excess, and democracies were found to be
motivated by internal demand for UAVs. Lastly, it was found that autocratic states seek prestige
and status by acquiring armed UAVs, and that democracies sought to reduce domestic casualties
and collateral damage in their acquisition of drones. While the findings from France and Saudi
Arabia are individual cases, they can serve as strong indicators for the actions of democracies
and autocracies in their drone programs.

The implications of these findings could lead to further assertions about the future of
drone proliferation. Using some of the conclusions from this paper, political scientists can
analyze states that have not yet acquired armed UAVs and predict by which methods those states
would likely acquire them. Furthermore, these hypotheses can be used as predictions for how and
why different regimes will begin to proliferate UAVs. Coming to further conclusions about the
continued proliferation of drones internationally can help produce more findings and potentially
lead to informed policy decisions about these UAVs. If a state’s actions can be predicted, vis-a-
vis drone programs, then policy makers can begin to take steps measures such as reinforcing
institutions to prevent the further proliferation of some of these dangerous technologies. These
findings also contribute to scholarship about the relationships between autocracies and
democracies, reinforcing theories about similar regime types cooperating only with one
another. Despite being a contemporary type of weaponry, drones demonstrate the need for
political science and security studies to shift into a modern domain. As armed drones become a
new dimension in warfare, more states will invest heavily in these technologies. While these
states begin to proliferate and expand drone programs, scholarship needs to transition into
focusing on how this new advanced warfare will not only transform states, but the future of
combat and the world.
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