

An ex-combatant holds ammunition 8 February 2012 in Attécoubé, Abidjan, Côte d'Ivoire. He is one of several to have participated in a disarmament, demobilization, and reintegration operation conducted in the area by the United Nations operation in Côte d'Ivoire. (Photo courtesy of the United Nations)

The Global Spread of Arms The Link between State Collapse, Small Arms Proliferation, and Global Conflict

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any established states around the world have collapsed in recent decades. The collapse of a state poses new, sometimes unanticipated, strategic concerns for other nations. One such concern is the proliferation of small arms and light weapons (SALW) that find their way into the hands of nongovernment actors due to either abandonment or loss of control over government weapons depots. Such weapons are favored by militias, rebels, terrorist organizations, and crime groups. They are inexpensive, easy to produce, adapted to be especially lethal in combat, and require minimal training to operate and maintain.

According to a United Nations (UN) report on disarmament, small arms are a category of weapons that includes handheld, small-caliber firearms such as pistols, shotguns, rifles, assault rifles, and small-caliber machine guns. On the other hand, light weapons include medium-caliber firearms such as crew-served medium and heavy machine guns, as well as hand grenades, rifle grenades, rocket-propelled grenades, small-caliber mortars, small-caliber rockets, and portable air-defense systems.¹

When a state with a large supply of SALW collapses, the incentives for the failed state's incumbent leaders, the new government's leaders, or whoever may seize regional power to contain proliferation are lowered. For example, sometimes the people who take power after a collapse may actually promote instead of discourage proliferation for economic or political gain. Additionally, increasing volatility in a state due to the collapse of domestic law enforcement makes containing SALW proliferation more difficult, especially if the state moves from instability and civil unrest to open civil war. With any such collapse, borders become less protected and more porous as state regulation and border patrolling decrease. This makes it easier to conduct unregulated weapon transfers. Arms can spread to areas with a high demand, potentially inciting new conflicts or worsening existing ones.

Studying the mechanisms of state collapse, and how they lead to SALW proliferation, can enhance the overall understanding of conflicts worldwide. This article seeks to shed light on the link between state collapse and SALW proliferation through the lens of the collapses of the Soviet Union in 1991 and Libya in 2011. It will highlight the need for a U.S. strategy to prevent SALW proliferation in order to protect global national security interests.

A Process That Leads to SALW Proliferation

A state collapse occurs when the government of a state can no longer effectively govern its territory. For the purposes of this paper, complete state collapse is defined as a polity's failure to maintain the ability to provide its citizens internal and external security as well as basic goods and services, while losing the capability to conduct foreign policy.

By way of comparison, stable states do not typically proliferate large quantities of SALW illegally because they have institutional controls in place to regulate their transfer and use, including constraints placed by international law. For example, although many weapons are bought and sold on international markets, the UN and other international organizations provide a check on the community of viable states so weapons do not flow in large quantities to nonstate actors or certain designated, usually embargoed, states. Consequently, if a legitimate state were to proliferate in a manner that the international community deemed illegal, it could face international sanctions or even a military response. This creates incentives for legitimate states to prevent or tightly limit SALW distribution. In contrast, failed states characteristically are no longer governed by internally recognized legal authority and are therefore often disconnected from systems of international law. Weapons dealers operating in the absence of constraints imposed by domestic law may proliferate SALW without some of the same potential consequences. Notwithstanding, the UN remains a key international buffer against proliferation coming from failed states, though indirectly.

When states are failing, the institutions that monitor legal, and illegal, SALW transfers break down. Under such circumstances, these institutions lose the capability to account for and prevent SALW proliferation. The result is a lack of centralized national oversight over SALW stockpiles and manufacturing. Moreover, in failed states, emerging regional leaders sometimes take over local administrative functions, including the control of local weapons stockpiles. In many cases, these local leaders acquire real regional power because they have seized control over some of the SALW inventories. Without centrally recognized law and centralized control, the new, local controllers have little incentive not to proliferate SALW. Thus, international sanctions are less likely to influence them. Instead, such leaders are more likely to funnel SALW to other groups for their own economic or political gain.

Centralized oversight by a recognized governing body that is also accountable to international law is necessary to prevent international proliferation of weapons. However, a legitimate authority may not become available until the establishment of a new central government. And, even then, any new government—which likely will be operating with limited resources while struggling to establish legitimacy in the eyes of its populace and the international community—may not be able to establish sufficient centralized control and rule of law to prevent the uncontrolled transfer of arms.

The theoretical framework in figure 1 depicts the process that leads to SALW proliferation following a state collapse. This framework predicts increases in SALW among certain militias, rebels, terrorist organizations, and crime groups. Given a state with large SALW supplies or manufacturing capabilities, when the state collapses and its institutions become weak or absent, new leaders seizing power are likely to export SALW to groups inside or outside the state's former borders. Analyses of the collapses es of the Soviet Union in 1991 and Libya in 2011 highlight the application of this model framework.

The 1991 Soviet Union Collapse

During the Cold War, the Soviet Union dedicated vast resources to military spending, including the manufacture and stockpiling of SALW. For example, estimates of Soviet military spending in 1988 range from \$384 million to \$200 billion per year.² As a result, when the Soviet Union collapsed in 1991, it left fifteen newly independent states, many of which held large surpluses of SALW in addition to massive SALW manufacturing capabilities. As just one example, Ukraine inherited eighteen thousand artillery pieces, eleven thousand armored vehicles, millions of SALW, and millions of tons of ammunition.³

In the aftermath of the Soviet collapse, a number of circumstances led to SALW proliferation. First, the implosion of the Soviet Union created economic turmoil and extreme hardship as well as policy and power vacuums that the new states needed time to fill. Second, the new states did not need the stockpiles they inherited. Since they could no longer afford to maintain the former massive standing armies of the Soviet era, there were millions of unneeded weapons available for distribution.

Independent variable: state collapse Mechanism: weak institutions weak institutions Mechanism for oversight of SALW Mechanism: lower incentive to not proliferate

Dependent variable: SALW proliferation

(Graphic by 2nd Lt. Josef Danczuk, U.S. Army)

Figure 1. Framework for Small Arms and Light Weapons (SALW) Proliferation

Third, there was a personal economic or political incentive for leaders of those new states to sell the excess weapons. Fourth, demand at that time was constantly high, especially in the developing world. There were potential buyers in states and rebel groups, even some within the former Soviet republics. The consequence was that the states' newly independent and fragile central governing institutions, which inherited control over the SALW stockpiles, largely could not curtail the incentive to sell them for economic gain or political purposes. For example, former Soviet SALW are believed to have fueled many civil wars throughout Africa, including the First Liberian Civil War, later prompting a UN arms embargo that was ineffective at preventing former Soviet republics from selling arms.⁴

Ukraine. One example of SALW proliferation was the post-Soviet state of Ukraine. According to a report published in 2012 by the Geneva Centre for the Democratic Control of Armed Forces, following Ukraine's independence, more than 114 Ukrainian companies and organizations sold arms internationally with few legal restrictions or export controls from 1994 through 1997.⁵ It was in 1996 that concern for lax control over such exports resulted in Ukraine creating a state-owned company named Ukrspecexport to handle its arms deals with other countries. However, Ukrspecexport enjoyed high autonomy within the Ukrainian government in its decisions regarding arms sales so legitimate constraints on Overall, Ukraine had been a major arms exporter since its independence. The report from the Geneva Centre for the Democratic Control of Armed Forces provides data suggesting that Ukrainian companies and organizations sold \$32.4 billion worth of arms internationally from 1989 to 2004. If correct, this high value of arms sales, including SALW, helps demonstrate how decentralized control after

sales remained suspect.6

According to the same report, Ukraine had been managing "military-technical cooperation and export trade in sensitive products more as a specific process rather than as a component of international state activity," since independence, thereby limiting public information and stifling reform attempts.⁷ Specifically regarding the period immediately following the collapse of the Soviet Union, the report claims, "the Ukrainian arms export control system was performing poorly in its early period" since the exports were easily approved and conducted among over one hundred businesses and organizations.8

Five years after the collapse of the Soviet

mal state restrictions.



A stockpile of AK-47 rifles from the Sudan People's Liberation Army burns at the launch of the disarmament, demobilization, and reintegration program conducted by the United Nations Mission 10 June 2009 in Juba, southern Sudan. (Photo courtesy of the United Nations)

Union, the Ukrainian Cabinet of Ministers estab-
lished the State Service of Ukraine for Export Control
(SSUEC) to oversee all state export services, including
general arms exports and SALW. However, it was not
until 2006 that the SSUEC certified compliance with
internal export control programs in the majority of
arms export companies and organizations.⁹ This period
between the Soviet collapse in 1991 and Ukraine's
establishment of export control in 2006 represented
a substantial time during which the export oversight
agency of Ukraine was considerably weak, allowingnew p
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new president was violently overthrown. Independent Georgia then found itself in a complex civil war that included violent efforts by Abkhazian and South Ossetian separatists to secede.¹¹

In a 2002 analysis, Spyros Demetriou, writing for the Smalls Arms Survey research project of the Graduate Institute of International and Development Studies, Geneva, Switzerland, compared the quantity and quality of SALW possessed by armed groups in Georgia before and after the collapse of the Soviet Union. The analysis clearly demonstrates how the Soviet collapse led to SALW proliferation in Georgia. For example, from 1989 to 1991, two paramilitary groups, the National Guard

the collapse of the Soviet Union allowed for SALW proliferation from Ukraine.¹⁰

Georgia. The situation in the newly independent Georgia also led to SALW proliferation. Before its independence, the Soviet Union designated the Georgian region of Abkhazia, home to the minority ethnic group Abkhaz, as an Autonomous Soviet Socialist Republic. Additionally, the Soviet Union designated Ossetia as an autonomous oblast within the greater Georgian Soviet Socialist Republic. Under the Soviet system, the designated ethnic minorities enjoyed, in principle, a degree of autonomy in conducting political affairs, although the Georgian Communist Party abused them during the rule of Joseph Stalin.

Not long after Georgia's independence in 1991, its

Ukrspecexport to permit dubious arms sales with mini-

and another called the White Eagle, were only able to equip themselves with enough SALW to arm about 60 percent of their members.¹² Furthermore, some of those arms were merely hunting rifles, training rifles, or bolt-action rifles preserved since World War II—severely limiting the groups' combat capabilities.¹³

However, as control of the military and the state fell into disarray pursuant to the collapse, the arsenals of the Soviet military in Georgia fell into the hands of various combatant groups. The SALW proliferation from Soviet arsenals resulted from the activities of opportunistic Russian military officers from the Transcaucasian Military District who, according to Demetriou, distributed or sold weapons. Additionally, other proliferation resulted due to theft from, or outright seizure of, loosely controlled weapons stockpiles. The former Soviet forces did not reorganize into the Group of Russian Armed Forces in the Transcaucasus (GRVZ) until late August 1992. However, the military personnel and their equipment remained in Georgia as it took time for Russian and Georgian officials to negotiate a treaty regarding withdrawal of forces and equipment.14

According to Demetriou, flawed policies and gaps in the command-and-control of the residual post-Soviet military structure, together with widespread impoverishment of the Russian troops due to the disestablishment of the Soviet troop pay and sustainment system, led individual commanders to independently seek alternate sources of support for their units. As a result, local military officers were left to their own devices and followed their own agendas as they sought to augment their ability to sustain troop formations and their own income during this tumultuous period.¹⁵

Demetriou concludes that armed groups within Georgia acquired SALW in four main ways. First, they seized arms directly from the former Soviet stockpiles and convoys. In late 1991 into 1992, there were six hundred recorded incidents of seizures of stockpiles. Second, Georgian groups received SALW through free distribution from Soviet and Russian forces. Local officers exercised their own discretion in supplying arms to Georgian groups, not only the National Guard but also to groups such as the Abkhazia separatists. Those local officers were able to get away with simply gifting SALW by writing them up as forcibly stolen. Third, Russian military forces sold SALW to combatant groups within Georgia. In such cases, the Russian commanders were exploiting the



availability of excess weapons to turn a profit. Fourth, Georgian groups imported arms from regional suppliers such as Armenia and Azerbaijan.¹⁶

Therefore, post-collapse groups on all sides became extremely well armed in terms of quantity and quality of SALW. By 1992 to 1993, all armed groups in Georgia had plentiful access to stockpiles of modern AK-74 assault rifles, rocket-propelled grenades, mortars, Kalashnikov RPK light machine guns, and others. For example, before the collapse, President Zviad Gamsakhurdia's National Guard paramilitary force had fewer than four hundred combatants, and only 60 percent had firearms; by 1993, the force numbered approximately twelve thousand combatants and had acquired enough SALW to equip 150 percent of that number, largely due to acquisitions from former Soviet arsenals.¹⁷



Fighters for Libya's interim government rejoice 17 October 2011 after winning control of the Gaddhafi stronghold of Bani Walid in northern Libya. (Photo courtesy of Wikimedia Commons)

The 2011 Libyan Collapse

The Soviet Union's collapse is not the only example of the intrinsic link between state collapse and SALW proliferation. Following the 2011 Libyan uprising and subsequent air strikes led by the North Atlantic Treaty Organization (NATO), Mu'ammar Gaddhafi's regime fell. In an attempt to fill the governmental void, Libya's provisional government, the National Transitional Council, attempted to set up a new government in Tripoli as NATO reduced its military role. However, in the absence of a unitary military after the former Gaddhafi forces were defeated, the council had no way to enforce its decisions and struggled to establish security and order. Additionally, many of the numerous militia leaders who had united to overthrow the regime chose to remain armed and mobilized in defiance of the new government, declaring themselves "guardians of the revolution," ostensibly to prevent a counterrevolution or new government abuses.¹⁸ One result was that some of the regime's large weapon stockpiles were looted since the former military had disintegrated, and the government had no one to guard and secure them.¹⁹

Although the transitional council wrote a constitution aimed at creating a new, permanent government, the elected parliament—the General National Congress (GNC)—was unpopular with the majority of Libyans and militias. The militias' refusal to turn over their weapons to the GNC displayed just how weak the new government really was. Though fragmented and lacking unity, the locally commanded militias became the de facto Libyan military forces.

To highlight the impact of state collapse on control of weapons in Libya, it is important to emphasize that Libyan institutions formerly responsible for overseeing SALW stockpiles simply vanished. According to a RAND Corporation research report by Christopher S. Chivvis and Jeffrey Martini, during the civil war, rebel militia groups had moved to seize the weapons caches throughout Libya's military posts. Furthermore, outside governments, such as France and Qatar, supplied arms directly to the rebels.²⁰ Without an accountable central government, and with a financial incentive to seize and sell weapons on the black market, independent militias proliferated SALW for their own economic gain and for maintaining their power independent of the provisional government. The local leaders heading such militias did not fear international or regional retaliation and acted with impunity, for good reason. Although many international groups and powers decried the SALW proliferation in post-Gaddhafi Libya, they were unwilling to take action. For example the UN and NATO were unable to pass sanctions against the perpetrators as there was no political will to intervene further to enforce them.²¹

The UN or NATO could have placed peacekeeping troops on the ground to enforce restrictions on SALW proliferation, but the 2011 UN Security Council (UNSC) Resolution 1973, authorizing a no-fly zone and airstrikes, prohibited any permanent ground troops.²² Any international forces in Libya would have required additional UNSC approval, as well as the domestic support of



More than seventeen thousand illegal weapons, seized or voluntarily handed over, are turned into scrap metal 20 December 2012 at a recycling center in Belgrade, Serbia. (Photo by Vesna Andjic, Radio Free Europe/Radio Liberty)

participating nations. Ultimately, there was no political appetite to do anything further.

However, in response to concerns over SALW proliferation, the UNSC appointed a panel of experts to investigate SALW flows out of Libya. The panel published its report in February 2014, saying that post-Gaddhafi Libya's procurement office, responsible for overseeing external arms transfers, not only took an extended time to be established but also was ineffective at regulating arms transfers.²³

The panel's report provides photographic evidence showing various types of Libyan SALW in fourteen nations outside Libya. The panel traced serial numbers and case markings on shipping containers back to Libya, and even back to the original manifests of Gaddhafi's imports of the 1970s and 1980s. The map in figure 2 illustrates the African countries where SALW were found that had originated in Libya, between 2011 and February 2014. (Some of the arms were routed through Turkey, Lebanon, or Qatar.) During a succession of failed governments, Libyan weapons continued to fall into the hands of militias, including Islamist groups that now are trying to take over the country.²⁴

Recommendations

As figure 1 (page 44) illustrates, four conditions appear to link state collapse and SALW proliferation. First, a state with the capability to become a supplier state, one with stockpiles of SALW, collapses. The collapse can be due to political unrest or armed conflict. Second, the state institutions responsible for oversight of SALW weaken as a result of the collapse. Third, the incentives enforced by antiproliferation entities fail to influence the new or weakened institutions overseeing SALW. Fourth, with the absence of incentives to prevent proliferation, local actors who have taken over the SALW in a collapsed state proliferate SALW to exploit economic and political opportunities.

Thus, if a state with large SALW surpluses or manufacturing capabilities was about to undergo a collapse, a significant amount of SALW proliferation could be predicted to follow, particularly if its borders were already porous. However, the theoretical framework that links state collapse to SALW proliferation could represent multiple opportunities for potential U.S. intervention to prevent proliferation. Possible actions to reduce the likelihood and severity of proliferation may include—

- helping new leaders establish powerful, centralized SALW oversight organizations to prevent SALW from falling outside of a central, accountable institution;
- preventing SALW from flowing further by transferring arms intercepted back to a centralized authority or reclaiming them from local groups; and
- if necessary, preventing the external flow of SALW.







Figure 2. States with Confirmed Libyan Small Arms and Light Weapons Proliferation

In the first case, if a state appears to be sliding toward failure, intervention should immediately address the issue of weakening institutions. With assistance of outside states such as the United States, institutions responsible for containing SALW should be adequately strengthened to effectively survive a state collapse and combat SALW proliferation. Alternatively, even if state institutions disintegrate, outside states should emphasize, among key first steps, helping new leaders establish powerful, centralized SALW oversight organizations to prevent SALW control from shifting to local leaders who are more likely to proliferate them for their own advantage. An additional benefit of undertaking these initiatives is that they present an opportunity for outside states to establish a meaningful connection with the new government.

Second, should the SALW move from a centralized system to local militias or political leaders, outside states can prevent SALW from flowing further by seeking to centralized authority. This may be either the new government or a special mission set up by an organization such as the UN or NATO to receive them. To counter the economic incentive

transfer arms intercepted back to a

for selling SALW, such outside missions could initiate a SALW buyback program that would return them to centralized control. Buyback programs have met with some, albeit limited, success in various parts of the world. Notwithstanding, and regrettably, historical events suggest that countering the political or economic incentives for groups to proliferate or retain SALW would prove difficult. To compel cooperation, one strategy might be for the new government to threaten to withhold participation in the new political process or elections from groups who fail to relinquish their SALW, although this approach may simply further strain tensions in a collapsed state.

Third, if SALW proliferation appears imminent, surrounding states need to take proactive measures to prevent the external flow of SALW rather than react after arms begin flowing into their sovereign territories.

Outside states, especially the collapsed states' neighbors, need to create stronger border security and firmly prosecute any agents transporting or receiving SALW. The United States, in a possible alternative to direct military or even political involvement in a volatile situation of a collapsed state, could train and assist neighboring states to prevent SALW proliferation, particularly as the United States has access to high-tech solutions such as unmanned aerial vehicles to monitor borders.

Conclusion

One area of future focus by the international community should be SALW proliferation resulting from state collapse. Outside states need to determine new economic, political, and if necessary, military means during peacekeeping or stability operations to prevent SALW proliferation from a collapsed state. Scholars and policymakers should be able to study the issues and devise ways to stop the proliferation of SALW throughout the world. This would in turn help reduce the number and severity of conflicts. Finally, reducing access to and use of SALW throughout the world, particularly in the developing world, should help ensure more consistent economic growth and political stability worldwide.

Biography

2nd Lt. Josef J. Danczuk, U.S. Army, is assigned to Alpha Battery, 5th Battalion, 7th Air Defense Artillery, at Baumholder, Germany. He is a graduate of the Air Defense Artillery Basic Officer Leaders Course. He holds BA degrees in history and in government and politics from the University of Maryland, focusing on military history and international relations. This article is based on his undergraduate honors thesis.

Notes

1. United Nations Security Council (UNSC), Report of the Panel of Governmental Experts on Small Arms, UNSC, 27 August 1997, accessed 27 June 2016, <u>http://www.un.org/Depts/ddar/</u> Firstcom/SGreport52/a52298.html.

2. Patterson Clark, "Spending on the Military, 1988–2012," Washington Post online, 26 March 2014, accessed 20 July 2016, https://www.washingtonpost.com/apps/g/page/world/ military-spending-1988-2012/892/; Special to the New York Times, "Soviet Military Budget: \$128 Billion Bombshell," International New York Times online, 31 May 1989, accessed 20 July 2016, http://www.nytimes.com/1989/05/31/world/ soviet-military-budget-128-billion-bombshell.html. The Times article reports that in 1989 the U.S. Central Intelligence Agency estimated Soviet military annual spending around \$200 billion.

3. Paul Holtom, *Ukrainian Arms Supplies to Sub-Saharan Africa* (Solna, Sweden: Stockholm International Peace Research Institute, 2011), 5.

4. Paul Holtom, United Nations Arms Embargoes: Their Impact on Arms Flows and Target Behaviour, Case Study: Liberia, 1992-2006 (Solna, Sweden: Stockholm International Peace Research Institute, 2007), 4–6, 10–12.

5. Center for Army, Conversion, and Disarmament Studies, *Challenges Facing Arms Export Control in Ukraine and the Russian Federation* (Geneva, Switzerland: The Geneva Centre for the Democratic Control of Armed Forces, 2012), 5–6, accessed 27 June 2016, <u>http://www.dcaf.ch/content/down-</u> load/102557/1580727/file/RPS_14_Arms_Export_Control.pdf.

10. Ukrainian Parliamentary Verkhovna Rada Ad Hoc Investigative Committee, cited in Center for Army, Conversion, and Disarmament Studies, *Challenges Facing Arms Export Control*, 5–6. The Center estimates that the calculations, based on figures from the Institute for Strategic Studies, London, are questionable.

11. Spyros Demetriou, "Politics from the Barrel of a Gun: Small Arms Proliferation and Conflict in the Republic of Georgia (1989-2001)," Small Arms Survey Occasional Paper no. 6, (Geneva, Switzerland: Small Arms Survey, 2002), 3–6.

12. lbid., 9.

- 16. lbid., 11–14.
- 17. Ibid., 21.

18. David D. Kirkpatrick, "In Libya, Fighting May Outlast the Revolution," *New York Times*, 1 November 2011, accessed 27 June 2016, <u>http://www.nytimes.com/2011/11/02/world/africa/in-libya-</u> the-fighting-may-outlast-the-revolution.html?_r=0.

19. Bates Gill, "Libya at the Crossroads—the Challenge of Consolidating Peace," commentary in the Stockholm International Peace Research Institute's Global Security and Arms Control online newsletter, 26 May 2011, accessed 27 June 2016, <u>http://www.sipri.org/media/newsletter/essay/september11</u>.

20. Christopher S. Chivvis and Jeffrey Martini, *Libya After Qaddafi: Lessons and Implications for the Future* (Santa Monica, CA: RAND Corporation, 2014), 8–9, accessed 27 June 2016, <u>http://www.rand.org/content/dam/rand/pubs/research_reports/RR500/RR577/</u> RAND_RR577.pdf.

21. lbid., 5-6, 16-17.

22. UNSC, "Security Council Approves 'No-Fly Zone' over Libya, Authorizing 'All Necessary Measures' to Protect Civilians, by Vote of 10 in Favour with 5 Abstentions," United Nations website, 17 March 2011, accessed 27 June 2016, <u>http://www.un.org/press/en/2011/</u> sc10200.doc.htm#Resolution.

23. Panel of Experts on Libya, UNSC, "Final Report by the Panel of Experts [on Libya] Established Pursuant to Resolution 1973 (2011) Concerning Libya," United Nations website, 15 February 2014, accessed 27 June 2016, <u>http://hdl.handle.net/11176/32371</u>.

24. Giorgio Cafiero and Daniel Wagner, "Four Years After Gaddafi, Libya is a Failed State," Foreign Policy in Focus online, 6 April 2015, accessed 27 June 2016, <u>http://fpif.org/four-years-after-gaddafi-libya-is-a-failed-state/;</u> "Dozens of Pro-Government Fighters Killed in Libya Clash," 22 June 2016, Al Jazeera online, accessed 27 June 2016, <u>http://www.aljazeera.com/news/2016/06/dozens-pro-government-fighters-killed-libya-clash-160622130408024.html</u>.

^{6.} lbid., 6-7.

^{7.} Ibid., 23.

^{8.} lbid., 5.

^{9.} lbid., 6-7.

^{13.} lbid., 8-9.

^{14.} lbid., 10-14.

^{15.} lbid., 10–11.