#### 【論 文】

## Data-Gathering Project on War and Conflict in International Relations Field

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#### Introduction

Since the publication of the classical work of Quincy Wright A Study of War in 1942, numerous books and articles have been devoted to the scientific study of the causes of war and the conditions of peace in International Relations field. At the center of contemporary research lie data-gathering projects on war and conflict. Counting of and analyzing various kinds of war and conflict should be regarded as one of the most important research agendas today. War/conflict datasets serve as a valuable source of information not only for researchers but also for policy-makers. Especially given the increasing magnitude and severity of contemporary wars and conflicts and the rising vulnerability of ordinary peoples to the various forms of violence, the study of war and conflict has gained renewed focus since the early 1990s,

Although the mushrooming of data-gathering projects in the 1990s reflects the rising relevance of the scientific and systematic approach to the study of war and conflict, these efforts have still been characterized by conceptual confusion and duplications.

The purpose of this paper is therefore to describe and discuss the current state of the existing data-gathering projects on war and conflict in International Relations field. As the major databases, the Correlates of War Project, International Crisis Behavior Project, and Uppsala Conflict Data Project are examined here.

This article argues that the changing nature and the increasing severity of contemporary war and conflict have required us to develop a more refined and integrated classification of war and conflict and that more collaborative projects and dialogues should be promoted for the accumulation of objective and reliable knowledge about them.

# 1. The Origin and Development of Data-Gathering Project on War and Conflict in International Relations Field

Since its inception, International Relations as a field of study has devoted tremendous

efforts to understand the causes of war and conditions of peace. This is because the field emerged with the context of outbreak of World War I and creation of the League of Nations in the early twentieth century. Since then, given the extraordinary human cost of World War I and subsequent World War II, so many books and articles have been published on this subject.

It is true that not a few of these studies of war and peace tended to be normative and subjective, rather than empirical and objective. This may be due to the fact that the problem of war and peace in the age of nuclear warfare is highly serious and ethical in nature. In addition, the so-called "traditional" researchers of International Relations whose study have rooted in humanistic literature and history tend to think that events in international arena are quite unique and incomparable and that therefore there can be no scientific knowledge which can be applicable beyond time and space. <sup>1</sup> Dina A. Zinnes elaborates differences between the traditional and "scientific" approach (in her terminology, Scientific Study of International Politics, SSIP) as follows:

There are two fundamental ingredients in all SSIP research: (1) a willingness to move from the unique to the general and consider classes of events and types of entities; and (2) a commitment to search for patterns of association between these classes. The SSIP researcher is distinguished from his traditional counterpart by his concern for *variables* and his goal of searching for *relationships* between variables. In contrast, the "traditional" researcher is usually concerned with historical accounts of unique events or descriptions of the characteristics of specific entities. <sup>2</sup>

Although the traditional approach has produced valuable insights and hypotheses about the causes of war and conditions of peace in general, speculation on and normative study of particular wars and conflicts through subjective value judgments have also limitations. As one scholar put it:

The lack of scientific studies prevents the attainment of confirmed knowledge, based on evidence, about the origins of war among nations. Most information about war only relates what happened at a particular time, in a particular place, and under particular circumstances; such information is practically useless in anticipating the outbreak and

<sup>1</sup> For the traditional approach to the study of international relations, see, Klaus Knorr and James N. Rosenau, eds., Contending Approaches to International Politics, Princeton University Press, 1969.; Ray Maghroori and Bennett Ramberg, ed., Globalism Versus Realism: International Relations' Third Debate, Westview Press, 1982.; and James E. Dougherty and Robert L. Pfaltzgraff, Jr., Contending Theories of International Relations: A Comprehensive Survey, Harper & Row Publishers, NY, 1981.

<sup>2</sup> Dina A Zinnes, Contemporary Research in International Relations, Free Press, 1976, p.2.

Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field devising strategies for preventing future wars. <sup>3</sup>

It is this dissatisfaction with the state of the traditional approaches that a growing number of researchers have begun to adopt more scientific methods and techniques for their analysis.

The scientific study of war and peace in International Relations has its origin to such researchers as Pitirim Sorokin, Quincy Wight, Lewis F. Richardson, and others from the late 1930s. <sup>4</sup> Their works were based on the recognition that the study of war and peace should be conducted on the basis of reliable and objective data. Among them, Wright is widely considered as the founding father of the scientific study of war and peace. As some researchers describe, "Wight engaged in path-finding efforts to bring the field of peace research from its polemical and normative foundations to its present empirical and quantitative emphasis." <sup>5</sup> In his A Study of War, Wright identified 278 "Wars of Modern Civilization" for the period 1480-1941 and conducted detailed analysis on these wars. <sup>6</sup>

One of a few pioneering endeavors of data-gathering project is the Correlates of War Project founded in 1963 by J. David Singer at the University of Michigan. The original and continuing goal of the Project has been the systematic accumulation of scientific knowledge about war. <sup>7</sup> In the words of Bruce M. Russet, David Singer's Correlates of War (COW) is "the one which most explicitly takes the work of Wright and Richardson – especially the former—for its model." <sup>8</sup>

Singer himself described the academic achievement of Quincy Wright as follows:

If George Clemenceau is noted for pointing out that the conduct of war is too important to be left to the militarists, it is Quincy Wright who reminds us that the analysis of war is too important to be left to the intuitionists. After years and volumes of literary speculation on the causes of international war, it was he who undertook the first systematic search for those empirical regularities which might shed some light on the origins of war among nations. <sup>9</sup>

<sup>3</sup> Stuart A. Bremer, Cynthia Cannizzo, Charles W. Kegley, Jr., James Lee Ray (Adapted by Marie T. Henehan), "The Scientific Study of War: A Learning Package," in John A. Vasquez and Marie T. Henehane, eds., *The Scientific Study of Peace and War*, Lexington Books, 1992, p.375.

<sup>4</sup> See, Pitirim Sorokin, Social and Cultural Dynamics: Fluctuation of Social Relationships, War, and Revolution, American Book Co., 1937, Quincy Wright, A Study of War, University of Chicago Press, 1942, and Lewis F. Richardson, Statistics of Deadly Quarrels, Boxwood Press, 1960.

<sup>5</sup> Bremer, Cannizzo, Kegley, and Ray, ibid., p.377.

<sup>6</sup> Wright, op.cit.

<sup>7</sup> The COW Project Homepage, http://www.correlatesofwar.org/

<sup>8</sup> J. David Singer and Associates, Explaining War: Selected Papers from the Correlates of War Project, Sage, 1979, p.7.

<sup>9</sup> J. David Singer, "From a Study of War to Peace Research: Some Criteria and Strategies," in J. David Singer and Associates, *ibid.*, p.21.

Stimulated by the Correlates of War Project, a number of significant quantitative researches and projects have been launched since 1970s. It is generally recognized that the 1970s should be regarded as a period when the International Relations field begun to shift its focus from normative/subjective description and explanation of international events to scientific and empirical analysis of them for the accumulation of objective knowledge. The factors contributing to this include the increasing influence of Behavioral Science upon the International Relations field <sup>10</sup>, the rising fear about the outbreak of nuclear warfare between two Superpowers, the growing severity of modern war and conflict, the advance in information processing technology, and so on.

The 1990s saw these data-gathering projects gaining further momentum because of the following two reasons.

The first reason is theoretical one. With the end of cold war, there has been growing quest for understanding the nature of the Cold War and post-Cold War World. As exemplified by "Long Peace" debate 11, heated debates have revolved around the question of how to evaluate the nature and pattern of the wars and conflicts both in the Cold War and post-Cold War world. Is the post-Cold War world more dangerous than the Cold War world? Are there any differences in the pattern of conflicts between the Cold War and post-Cold War period? Are contemporary conflicts different from earlier ones? Immediately after the fall of Berlin Wall and disintegration of USSR there was euphoria that the end of Cold War would bring us a brighter future. On the other hand, the so-called "realist" such as John L. Gaddis and John J. Mearsheimer tended to stress the relative stability of the Cold War world and predicted the increase in number and severity of wars and conflicts in the post-Cold War world. 12 In examining the validity of these arguments, objective and reliable data on war and conflict are indispensable.

The second reason is policy-related one. There has been a growing consensus among policy-makers and practitioners that a more systematic and effective policy framework to cope with the changing nature and rising severity of contemporary war and conflict is urgently needed. One characteristic of contemporary war and conflict lies in the fact that the human cost of various forms of violence has already reached a point where international community can no longer tolerate. The study of the deaths in wars and conflicts by Milton Leitenberg reveals that from 1945-2000 the total mortality is 50-51

<sup>10</sup> For the impact of behavioral science upon International Relations field, see J David Singer, "The Behavioral Science Approach to International Relations: Payoffs and Prospects," SAIS Review, Vol.X., Summer, 1966, pp.12-20.

<sup>11</sup> For "Long Peace" debate, see John. L. Gaddis, The Long Peace: Inquires into the History of the Cold War, Oxford University Press, 1987.; Charles W. Kegley, ed., The Long Postwar Peace, Harper Collins Publishers, 1991, and John J. Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," International Security, Vol. 15. No.1., 1990, pp.5-56.

<sup>12</sup> Gaddis, ibid., and Mearsheimer, ibid.

million people and that deaths in wars and conflicts in the 1990s amounts to around 10-11 million people. <sup>13</sup> According to the study of Ruth Leger Sivard, the proportion of civilian war-related deaths, which had averaged around 50 per cent since the eighteenth century, increased to 73 per cent in the 1970s and was close to 90 per cent in 1990. <sup>14</sup> According to the Office of the United Nations High Commissioner for Refugees (UNHCR), at the start of 2005, the number of peoples "of concern" to UNHCR rose to 19.2 million from 17 million the previous year, an increase of 13 percent. <sup>15</sup> From the practical point of view, a solid and reliable database of war and conflict is indispensable for analyzing and devising effective and viable policies to promote human security of ordinary peoples all over the world.

It is under these contexts that various data-gathering projects have gained momentum since the early 1990s. The list of major war/conflict datasets existing today is shown in Table 1.

Table 1: The List of Major War/Conflict Datasets

Project Title or Researcher's Name	Temporal Domain	Spatial Domain	Type of Event
AKUF	1945-present (?)	Global	War
Butterworth	1945-1974 Global I		Interstate conflict
CASCON	Post-WWII-May 2000 Global		Conflict
Civil War Termination (CWT)	1927-1992	Global	Civil War
Conflict Catalog	1400 AD-present	Global	Violent Conflict
Correlates of War (COW)	1816-1997	Global	War and Dispute
DON	1950-1965	Global	Conflict behavior
Doyle and Sambanis	1944-December 1999	Global	Civil War
ECOR	1985-2000	Global	Conflict
Encyclopedia of Conflict Since WW-II	1945-1998	Global	Conflict
Fearon and Laitin	1945-present	Global	Civil conflict
Great Power Wars	1595-1815	Global	War
Haas Collective Security Data	1945-1990	Global	Conflict and intervention by IO
IISS Armed Conflict Database	1997-present	Global	Conflict
International Conflict	1945-1995	Global	Conflict
International Crisis Behavior Project (ICB)	1918-1994	Global	Crisis
Issue Correlates of War (ICOW)	1816-2000	Global	Contentious Issues
Kende	1945-1969, 1967-1976	Global	War
KOSIMO	1945-1999	Global	Conflict
Luard	1400-1984	Global	War
Major Armed Conflict	1945-1995, 1648-1989	Global	War
Major Episodes of Political Violence	1946-1999	Global	War
Minorities at Risk	1945-2000	Global	Conflict
Miroir, Remacle & Paye	1945-1999	Global	Conflict

<sup>13</sup> Milton Leitenberg, "Deaths in Wars and Conflicts Between 1945 and 2000," Paper Prepared for Conference on Data Collection in Armed Conflict, Uppsala, Sweden, June 8-9, 2001, p.1.

<sup>14</sup> Ruth Leger Sivard, World Military and Social Expenditures, Leesburg, Va., World Priorities; SIPRI Annual, cited from A.B Fetherston, Towards a Theory of United Nations Peaceheeping, Macmillan, 1994, pp.20-21.

<sup>15</sup> See, http://www.unhcr.ch/cgi-bin/texis/vtx/basics/opendoc.htm?tbl=BASICS&id=3b028097c

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Overt Military Intervention (OMIDATA)	1945-1988 or 1991	Global	Intervention
PIOOM	(1997?1998?)-present	Global	Conflict
Project Ploughshares Armed Conflict Report	1997-present	Global	Armed conflict
Richardson	1820-1949	Global	War
Rivalry	1816-1992	Global	Rivalry
SHERFACS	Unclear; approx. 1940-1990	Global	Conflict
Sorokin	600 B.C1924	Some European nations	War
State of War and Peace Atlas (SoWaP)	1990-2000	Global	War
State Failure Project	1955-2001	Global	State failure / Regime Change
Sutton	1820-1970	Global	Violent conflict
Territorial Change	1816-1996	Global	Territorial change
Third-Party Intervention	1945-1999	Global	Civil conflict
Uppsala Conflict Data Project (UCDP)	1946-2002	Global	Armed conflict
VINC (Violent, Intrastate Nationalist Conflicts)	1945-2001	Global	Conflict
Warfare and Armed Conflicts	1618-1991	Global	Armed conflict
World Conflicts	1945-1998	Global	All major wars and insurrections in the time period
World Military and Social Expenditures	1900-1995	Global	War
Wright	1480-1941	Global	War
BCOW (Behavioral Correlates of War)	1816-1980	Global	Interstate crisis
Conflict and Peace Data Bank (COPDAB)	1948-1978	Global	Event
CREON	1959-1968	Global, covering 36 nations	Event
European Protest and Coercion	1980-1995	28 European Countries	Protest and Coercion
FAST	Last few years	Africa, Asia, Europe and the Middle East	Early warning system using events data
Global Event Data System (GEDS)	1948-1978	Somewhat uneven	Event
International Political Interactions (IPI)	1979-1992	Coded and edited data of some countries	Political event
Kansas Events Data System (KEDS)	Several different datasets	Several different datasets	Event
PANDA (P24)	January 1984- April 1995	Global	Event
PRINCE	1966-1972	Some countries	Event
Terrorism in Western Europe-Event Data (TWEED)	1950-1999	Some European Countries	Act of terrorism
World Events Interaction Survey (WEIS)	January 1966- December 1978	Global	Event

Source: The Conflict Dataset Catalog (2001)<sup>16</sup> revised by the author.

<sup>16</sup> The Conflict Dataset Catalog was created by Kristine Eck, Department for Peace and Conflict Research, Uppsala University, to present a brief overview of the myriad of datasets available to researchers. Information for this is drawn from working papers of the 2001 Uppsala Conflict Data Conference.

#### 2. Three Major Data-Gathering Projects on War and Conflict

In this section, the major war/conflict data-gathering projects in International Relations field are briefly reviewed. This article does not intend to provide a comprehensive assessment of the existing datasets. Instead, it aims to highlight the major characteristics and findings of the eminent data-gathering projects. The three projects examined here are the Correlates of War Project, International Crisis Behavior Project, and Uppsala Conflict Data Project. They are most frequently utilized and considered to be reputable by both researchers and practitioners. They have some commonalities. First, they are administered by institutions; second, they provide worldwide coverage; and finally, the time span of their dataset is unlimited. Other data-gathering projects intended for specific books and articles, or conducted by individual researchers are not discussed here.

#### (1) Correlates of War (COW) Project (http://www.correlatesofwar.org/)

It is not too much to say that the Correlates of War (COW) Project has been the most frequently utilized database since the early 1970s. Huge amount of researches both qualitative and quantitative are conducted based on this COW dataset. According to its homepage, the purpose of the COW Project is to seek to facilitate the collection, dissemination, and use of accurate and reliable quantitative data in international relations, and key principles of the Project include a commitment to standard scientific principles of replication, data reliability, documentation, review, and the transparency of data collection procedures. According to its

The origin of this Project goes back to the joint project by David Singer and Melvin Small in 1963-64. However, in the late 1990s scholars became concerned about how the work of the Project could be continued given the pending retirement of J. David Singer, and arrangements were made to transfer the Project to Penn State University under the leadership of Stuart A. Bremer. The University has archived all available original material from the COW Project, and is extending and enlarging the data collection efforts. As of January 2005, the Project continues under Director Paul Diehl and Associate Director D. Scott Bennett. 19

The COW Project consists of various datasets, including State System Membership, War, Militalized Interstate Disputes (MID), National Material Capabilities, Formal Alliances,

<sup>17</sup> For the list of books and articles published on the basis of the COW datasets, see, http://www.correlatesofwar.org/

<sup>18</sup> See, http://www.correlatesofwar.org/

<sup>19</sup> See, http://www.correlatesofwar.org/

Territorial Change, Direct Contiguity, Colonial/Dependency Contiguity, Inter-governmental Organizations, and Bilateral Trade.

With reference to war, it has been defined as sustained combat between/among official military contingents involving substantial casualties. <sup>20</sup> Originally, wars were divided into international wars and civil wars. After several revisions, the current typology used in the COW Project is the following 6 types of war.

- 1). Interstate war (War Type 1): Defined as sustained armed combat between the two or more state members of the international system in which there is a total of at least 1000 battle-related fatalities.
- 2). Extra-systemic war. Defined as sustained armed combat between a state member of the international system and a non-system member political entity outside its territorial boundaries, in which there are at least 1000 battle-related fatalities per year.
  - (a). State vs. independent Non-State Actor (War Type 2.)
  - (b). State vs. dependent Non-State Actor (War Type 3.)
- 3). Intra-state war: Defined as sustained armed conflict between two armed forces within the boundaries of a state, in which there are at least 1000 battle-related fatalities per year.
  - (a). Civil War is a sustained combat between the armed forces of the government and forces of another entity.
    - (i). For central control (War Type 4.)
    - (ii). For local issues (War Type 5.)
  - (b). Inter-Communal War is a sustained combat between two or more communal groups (not involving the armed forces of the government) (War Type 6.)<sup>21</sup>

The comparison between the old and current typology of war is shown in Table 2.

In addition to the above-mentioned 6 types of war, the data on *Militalized Interstate Dispute (MID)* has been collected and updated. *A Militalized Interstate Dispute* is a conflict in which one or more states threaten, display, or use force against one or more other states. <sup>22</sup> The initial focus of the COW Project was war, particularly international war. However, as the COW Project expanded, more interest was expressed in examining conflict at lower levels of fatalities. This led to the creation of the MID dataset that

<sup>20</sup> Meredith Reid Sarkees, "The Correlates of War Data on War: An Update to 1997," Conflict Management and Peace Science, Vol.18, No.1, 2000, p.124.

<sup>21</sup> Sarkees, ibid., pp.126-130.

<sup>22</sup> See, http://www.correlatesofwar.org/

Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field

Table 2: The COW's Old and Current Typology of War

Old Typology	Current Typology
I. International Wars A: Interstate Wars B: Extra-systemic Wars 1) Imperial 2) Colonial	I. Inter-State Wars (type 1)
	<ul><li>II. Extra-State Wars</li><li>A: State vs. dependent non-state (type 2)</li><li>B: State vs. independent non-state (type 3)</li></ul>
II. Civil Wars	III. Intra-State Wars A: Civil Wars 1) For central control (type 4) 2) Over local issues (type 5) B: Inter-Communal wars (type 6)

Source: Sarkees, "The Correlates of War Data on War: An Update to 1997", pp.124-130

included disputes with fatality totals of 0~999.23

The current War dataset of the COW Project is version 3.0. It covers form 1816 to 1997. A revision and extension of the dataset to the year 2000 is in preparation. From 1816 to 1997, the COW Project identifies 79 inter-state wars, 108 extra-state wars, and 213 intra-state wars. See Table 3. The number of on-going wars for every year is shown in Figure.1

Table 3: COW, Number of War, by type, 1816-1997

	1816-1917	1918-1945	1946-1988	1989-1997	Total
Inter-state	40	16	22	1	79
Extra-state	80	13	15	0	108
Intra-state	87	23	77	26	213
Total	207	52	114	27	400

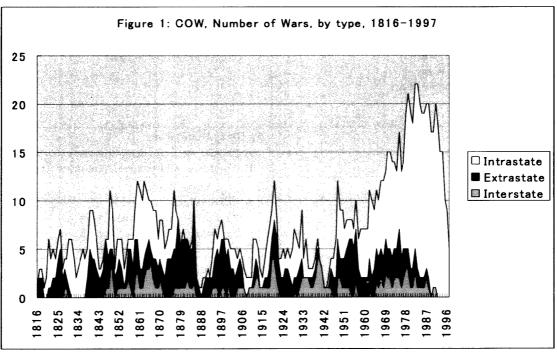
Source: The COW War dataset: Version 3.0.

#### (2) International Crisis Behavior (ICB) Project (http://www.icbnet.org/)

The origin of International Crisis Behavior (ICB) Project is explained on its home page as follows:

Over the course of the twentieth century, the onset of an interstate military-security crisis represents one of the most frequent forms of hostile interaction between adversarial states. Yet by the mid-1970s, there was still little systematic knowledge about crisis perceptions and the decision making style of such key actors as the USSR,

<sup>23</sup> Meredith Reid Sarkees and J. David Singer, "Armed Conflict Past & Future: A Master Typology?" A Working Paper presented at the 2001 Uppsala Conflict Data Conference, pp.9-10.



Source: The COW War dataset, Version.3.0.

about crises occurring in regions other than Europe, about crises experienced by weak states, about the role of alliance partners in crisis management, about triggers, outcomes, and the consequences of crises for the power, status, and behavior of participant states. Nor was there work on protracted conflicts and the crises embedded within them.<sup>24</sup>

Based on this recognition, the ICB Project has four specific objectives: the accumulation and dissemination of knowledge about interstate crises and protracted conflicts; the generation and testing of hypotheses about the effects of crisis-induced stress on coping and choice by decision makers; the discovery of patterns in key crisis dimensions-onset, actor behavior and crisis management, superpower activity, involvement by international organizations, and outcome; and application of the lessons of history to the advancement of international peace and world order. <sup>25</sup>

The ICB dataset is hosted and maintained by the Center for International Development and Conflict Management (CIDCM) at the University of Maryland. With other important datasets like *Polity, State Failure*, and *Minority at Risk*, the ICB dataset serves as the basis for CIDCM's biennial publication *Peace and Conflict*. The principal investigators of the ICB Project are currently Michael Brecher of McGill University (Canada) and Jonathan

<sup>24</sup> See, http://www.icbnet.org/Info/project\_information.html.

<sup>25</sup> See, http://www.icbnet.org/Info/project\_information.html

Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field

Wilkenfeld of University of Maryland.

The key ICB concepts are defined as follows:

A Foreign Policy Crisis: Defined as a crisis for an individual state, is a situation with three necessary and sufficient conditions: a threat to one or more basic values, along with an awareness of finite time for response to the value threat, and a heightened probability of involvement in military hostilities.

An International Crisis: Which has two broad conditions: 1) a change in type and/or increase in the intensity of disruptive, that is, hostile verbal or physical, interactions between two or more states, with a heightened possibility of military hostilities, that, in turn 2) destabilizes their relationship and challenges the structure of an international system-global, dominant, or subsystem.

A Protracted conflict: Defined as hostile interactions which extend over long periods of time with sporadic outbreaks of open warfare fluctuating in frequency and intensity. The stakes are very high, they linger on in time, and are not specific events or even clusters of events at one point in time; they are processes.<sup>26</sup>

Violence is coded by the most intense form of violence employed in the crisis as no violence, minor clashes, serious clashes and full-scale war.<sup>27</sup>

The ICB dataset is very sophisticated in a sense that they focus on the question of how the crises start, escalate, and terminate. Furthermore, it contains valuable information on the performance of mediators during each crisis. The theoretical framework of ICB dataset is a Unified Model of Crisis developed by Michael Brecher and Jonathan Wilkenfeld.<sup>28</sup>

The newest release of the ICB dataset is version 5.0. It contains information on 440 international crises, 32 protracted conflicts, and 970 crisis actors from the end of World War I (1918) through 2002. As for the version 5.0 dataset, a number of coding changes are made in earlier cases. These changes/corrections resulted from the availability of new information on older cases, or the identification of errors in earlier coding. The most important addition to the ICB dataset is the coding of a new set of 15 variables addressing mediation of international crises. <sup>29</sup>

Finally, the ICB Online website (http://www.cidcm.umd.edu/icb) presents an interactive version of the data. Site visitors can easily refer to data on the 440 crises and 970 state

<sup>26</sup> Jonathan Wilkenfeld, "The International Crisis Behavior Project: Origins, Current Status, and Future Directions," Paper prepared for Presentation at the Conference on Data Collection on Armed Conflict, Uppsala, Sweden, June 8-9, 2001., pp.3-4.

<sup>27</sup> See, Codebook for ICB1, http://www.icbnet.org/Data/ICB1-2005-final.pdf

<sup>28</sup> For "Unified Model of Crisis," see, Michael Brecher and Jonathan Wilkenfeld, A Study of Crisis, University of Michigan Press, 1997.

<sup>29</sup> See, http://www.icbnet.org/Data/release\_memo5.pdf

actors from the end of World War I through 2002 covered in the ICB international-level and actor-level datasets.

The number of crises by level of severity is presented in Table 4. The number of ongoing crises for every year is shown in Figure 2.

Table 4: ICB, Number of Crises by level, 1918-2002

	1918-1945	1946-1988	1989-2002	Total
no violence	42	119	18	179
minor clashes	10	33	14	57
Serious clashes	19	78	15	112
full-scale war	38	47	7	92
Total	109	277	54	440

Source: The ICB dataset, Version.5.0.

Source: The ICB dataset, Version.5.0.

#### (3) Uppsala Conflict Data Project (http://www.pcr.uu.se/research/UCDP/index.htm)

The Department of Peace and Conflict Research of Uppsala University in Sweden has hosted the Uppsala Conflict Data Project (UCDP) for more than 20 years. The Project is mainly administered under the auspices of Peter Wallensteen and Margareta Sollenberg.

The UCDP database provides information on armed conflicts, trends and peace agreements. The UCDP dataset has been published yearly in the report series *States in* 

Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field

Armed Conflict (Department of Peace and Conflict Research, Uppsala University) since 1987, in Stockholm International Peace Research Institute (SIPRI) Yearbook (Oxford University Press) since 1988, and, in Journal of Peace Research (Sage) since 1993.<sup>30</sup>

The key concept of the UCDP is armed conflict. An armed conflict is a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in one calendar years. The uniqueness of this definition is that at least one of the parties is the government of a state.

Armed conflicts are currently divided into three categories; interstate, (pure) intrastate, and intrastate with foreign involvement. They are defined as follows:

Interstate armed conflict: Defined as a conflict between two or more governments.

Intrastate armed conflict: Defined as a conflict between a government and a non-governmental party, with no interference from other countries.

Intrastate armed conflict with foreign involvement: Defined as a conflict within a country between a government and a non-governmental party; where the government, the opposition or both sides receive troop support from other governments that actively participates in the conflict.<sup>32</sup>

On the other hand, based on the number of casualties, armed conflicts are divided into the following three. Minor armed conflict results in at least 25 deaths per year and fewer than 1000 deaths over the course of the conflict. Intermediate armed conflict results in more than 1000 deaths during the course of the conflict, but fewer than 1000 in any given year. Finally, war results in more than 1000 deaths in any given year. <sup>33</sup> In SIPRI Yearbook, the term "major armed conflict" has been used. It denotes the sum of intermediate armed conflict and war.

As of August, 2005, the coverage of UCDP is from 1989 to 2003. The data is updated on a yearly basis.

See Figure 3 and 4 below. From 1989 to 2003, there were 116 conflicts in 78 countries. In 2003, 22 conflicts were active. Five of the conflicts active in 2003 reached the level of war. Most conflicts were internal; only seven interstate armed conflicts were recorded in the period 1989-2003, of which two were still active in 2003.<sup>34</sup>

 $<sup>30 \</sup>quad See, \ http://www.pcr.uu.se/research/UCDP/graphs1.htm$ 

<sup>31</sup> See, http://www.pcr.uu.se/research/UCDP/graphs1.htm

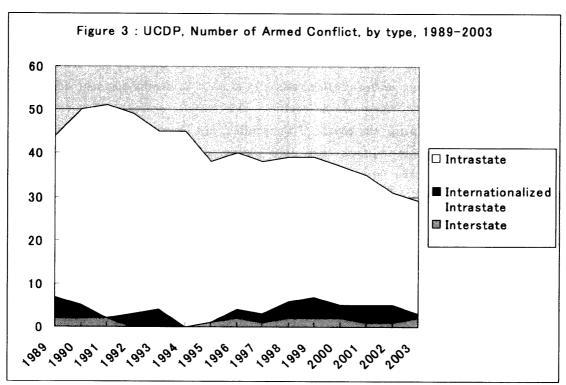
<sup>32</sup> See, http://www.pcr.uu.se/database/definitions\_all.htm

<sup>33</sup> See, http://www.pcr.uu.se/database/definitions\_all.htm

<sup>34</sup> Eriksson and Peter Wallensteen, "Armed Conflict, 1989-2003," Journal of Peace Research, Vol.41, No.5, 2004, p.625.

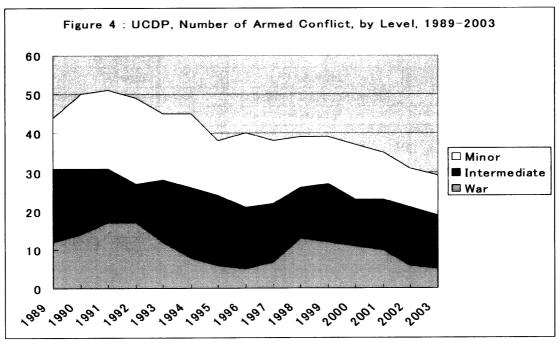
The UCDP dataset has been expanded to cover the full post-World War II period, 1946-2003 as part of a collaborative project between the Uppsala Conflict Data Project and the International Peace Research Institute, Oslo (PRIO). The first version of this Uppsala/PRIO dataset was described by Nils Petter Gleditsch, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Havard Strand in 2002. They explained about the origin of this joint project as follows:

For almost three decades the Correlates of War Project has supplied the data used by most studies of external and internal armed conflict. The COW war datasets use the relatively high threshold of 1,000 battle-deaths. For external conflict the COW project has created an alternative measure with a lower threshold on violence, the Militarized Interstate Disputes dataset. But for internal conflict, the COW project has not yet generated a measure with a lower violence threshold. On the other hand, the Uppsala Conflict Data Project has collected data on all conflicts with more than 25 battle-deaths, internal and external, from the end of the Cold War. This new dataset was generated to cover the period 1946-2000 on the basis of the Uppsala criteria of casualty threshold. <sup>35</sup>



Source: The Uppsala Armed Conflict Dataset, Version 3.0.

<sup>35</sup> Nils Petter Gleditsch, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg and Havard Strand, "Armed Conflict 1946-2000: A New Dataset," Journal of Peace Research Vol.39, No.5, 2002, p.616.



Source: The Uppsala Armed Conflict Dataset, Version 3.0.

In this expanded Armed Conflict dataset, the four types of armed conflict are defined as follows:

Extra-systemic armed conflict occurs between a state and a non-state group outside its own territory. (In the COW project, extra-systemic war is subdivided into colonial war and imperial war, but this division is not used here.)

Interstate armed conflict occurs between two or more states.

Internal armed conflict occurs between the government of a state and internal opposition groups without intervention from other states.

Internationalized internal armed conflict occurs between the government of a State and internal opposition groups with intervention from other states.<sup>36</sup>

The relationship between key concepts of the COW, UCDP, and Uppsala/PRIO datasets is summarized in Table 5 below.

As of August, 2005, the Uppsala/PRIO dataset is Version 3.0. It contains detailed information on armed conflicts from 1946 to 2003, with a complete listing with locations, actors, levels, types, and years of activity. The web page of PRIO (http://www.prio.no/cwp/armedconflict/) offers access to the dataset.

<sup>36</sup> Håvard Strand, Lars Wilhelmsen, and Nils Petter Gleditsch, Armed Conflict Dataset Codebook (Version2.1.) http://www.prio.no/cwp/armedconflict/current/codebook\_v3\_0.pdf

Table 5: Relationship between key concepts of COW, UCDP, and Uppsala/PRIO Datasets

COW (War)	UCDP (Armed Conflict)	Uppsala/PRIO (Armed Conflict)
Extra-state		Extra-systemic
Intra State	Intrastate	Internal
	Internationalized Intrastate	Internationalized Internal
Interstate	Interstate	Interstate

In the period from 1946 to 2003, there are 228 armed conflicts in 148 countries. The dataset finds 22 extra-systemic conflicts, 42 interstate conflicts, 136 internal conflicts, and 28 internationalized internal conflicts. The number of armed conflicts by type and by level are shown in Table 6 and 7. 103 of 228 conflicts had a peak level of war. 16 reached the level of intermediate conflict, and 109 remained minor. The chronological trend are described in Figure 5 and 6.

Table 6: Uppsala/PRIO, Number of Armed Conflicts, by type, 1946-2003

	1946-1988	1989-2003	Total
Extra-systemic	22	0	22
Interstate	35	7	42
Internal	48	88	136
Internationalized Internal	7	21	28
Total	112	116	228

Source: Uppsala/PRIO Armed Conflict Dataset, Version.3.0.

Table 7: Uppsala/PRIO, Number of Armed Conflicts, by level, 1946-2003

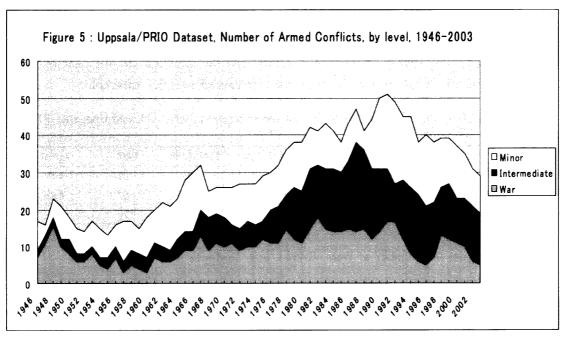
	1946-1988	1989-2003	1946-2003
Minor	58	51	109
Intermediate	10	6	16
War	44	59	103
Total	112	116	228

Source: Uppsala/PRIO Armed Conflict Dataset, Version.3.0.

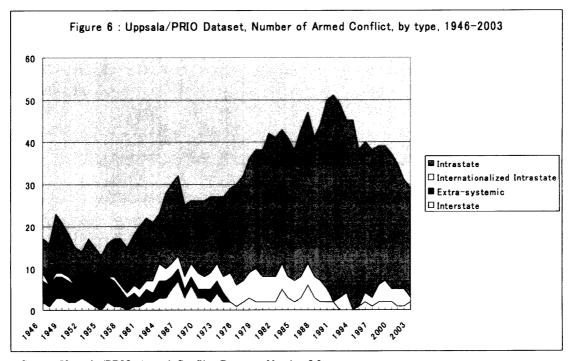
#### 3. The Comparison of the Datasets within the Context of Three Time Frames

In this section, the datasets of COW, ICB, and Uppsala/PRIO are compared within the context of the following three time frames: the pre-World War II period (1816-1945), post-World War II period (1946-1988), and post-Cold War period (1989-2003.) Main focus will be placed on the similarities and differences in the general patterns of wars, crises, and conflicts.

Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field



Source: Uppsala/PRIO Armed Conflict Dataset, Version.3.0.



Source: Uppsala/PRIO Armed Conflict Dataset, Version.3.0.

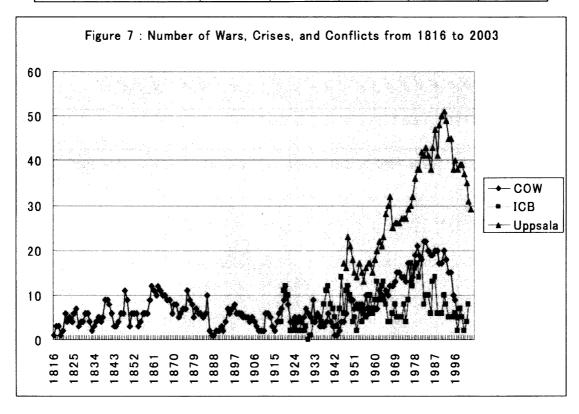
(1) General patterns of wars, crises, and conflicts from 1816 to 1945

Table 8 and Figure 7 show the total number of events recorded by the COW, ICB, and Uppsala/PRIO Projects. As you see graphically, despite the fundamental differences in

definition of the key concepts, the datasets of COW, ICB and Uppsala/PRIO Projects are quite consistent with each other. The large gap in number between Uppsala/PRIO dataset, and COW and ICB datasets arises from the fact that the minimum requirement of armed conflict of Uppsala/PRIO dataset is quite low in terms of casualty threshold.

Table 8: The comparison of the number of events between COW, ICB, and Uppsala/ PRIO datasets

	1816-1917	1918-1945	1946-1988	1989-	Total
COW (1816-1997)	207	52	114	27	400
ICB (1918-2002)	_	109	277	54	440
Uppsala/PRIO (1946-2003)	_	_	112	116	228

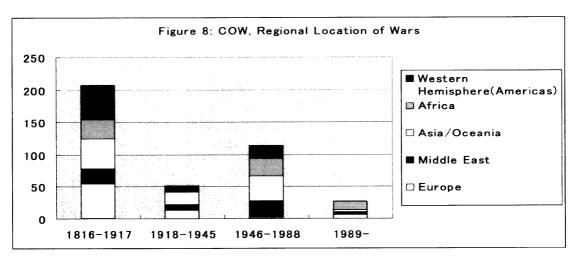


As for the general patterns of wars, crises, and conflicts in the pre-World War II period, only COW and ICB datasets are available. According to the COW dataset, the post-Napoleonic period (from 1816) begins with on-going Russia vs. Georgians War (intrastate one.) Between 1816 and 1917, the COW Project identifies 207 wars and the number of wars for every year fluctuates up and down within the range of 1 and 12. Of 207 wars, 40 are inter-state, 80 extra-state, and 87 intrastate ones. The highest number of wars is recorded in 1860 and 1863 (12 wars), and the lowest number is recorded in 1816, 1819, 1887, and 1888 (1 war.)

Between 1918 and 1945, the COW Project finds 52 wars and the ICB Project identifies 109 crises. The post-World War I period begins with 4 wars (COW) or 6 crises (ICB). Both Projects find local peaks around late 1910s and mid 1940s, which correspond to the World War I and World War II.

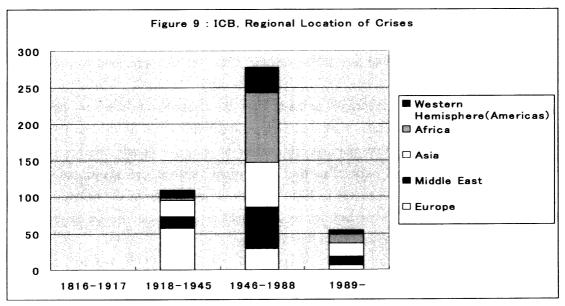
Based on the analysis of the COW dataset, Karl W. Deutsch concluded in 1980 that relative to the size of the system, wars had become about five times as rare as they were 150 years ago, pointing out that the average number of wars per decade had not changed greatly while the number of nations in the international system had grown more than fivefold, from 23 states in 1816 to 124 in 1965. Anyway, judging from the examination of the datasets of COW and ICB, we can not conclude that any particular period covering the three datasets is more war-prone than other periods.

Next, concerning the regional location of wars and crises, both COW and ICB datasets show that Europe was once a major battle field in the pre-World War II world. Of 207 wars counted from 1816 to 1917, the COW dataset finds that 55 wars occurred in Europe, 53 wars in Western Hemisphere, 46 wars in Asia/Oceana, 30 wars in Africa, 23 wars in Middle East. Of 109 crises identified from 1918 to 1945, the ICB dataset finds that 57 crises happened in Europe, 22 crises in Asia, 16 crises in Middle East, and 4 crises in Africa. But we see a drastic change over time in the locus of war and crisis in the twentieth century. As Figure 8, 9, and 10 all show, both number and proportion of wars, crises, and conflicts in Europe has decreased sharply until the late 1980s. In the post-World War II period, as recognized generally, the major war/conflict zone is the Third World.

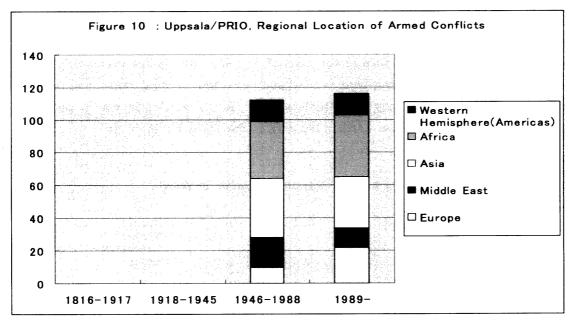


Source: The COW War Dataset, Version 3.0.

<sup>37</sup> Karl W. Deutsch, "An Interim Summary and Evaluation," in J. David Singer, ed., The Correlates of War: II, Testing Some Realpolitih Models, Free Press, 1980, p.289.



Source: The ICB Dataset, Version 5.0.



Source: The Uppsala/PRIO Armed Conflict Dataset, Version 3.0.

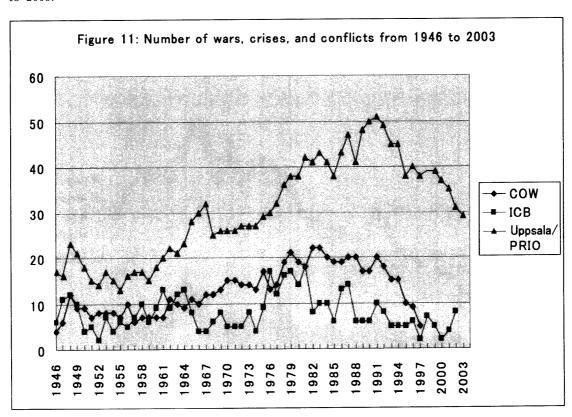
As for the type of wars and crises, only COW dataset can be utilized. See Table 9 below. Between 1816 and 1945, it finds 56 interstate wars, 93 extra-state wars, and 110 intra-state wars. From 1816 to 1917, extra state wars and intra-state wars were equally dominant, while three types of war were equally numerous from 1918 to 1945. There was a sharp decrease in number of inter-state wars over time. The COW dataset clearly confirms the generally recognized observation that the intra-state war has been most dominant since the

Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field end of World War II.

Table 9: COW, Number of Wars, by type, 1816-1997

	1816-1917	1918-1945	1946-1988	1989-1997	Total
Inter-state	40	16	22	1	79
Extra-state	80	13	15	0	108
Intra-state	87	23	77	26	213
Total	207	52	114	27	400

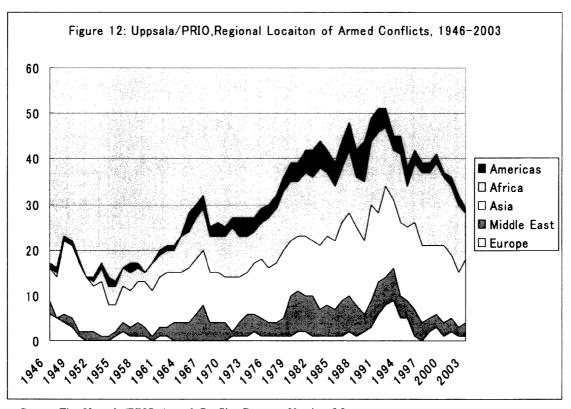
(2) General patterns of wars, crises, and conflicts from 1946 to 1988
Figure 11 presents the historical trend in number of wars, crises, and conflicts from 1946 to 2003.



From 1946 to 1988, 114 wars, 277 crises, and 112 armed conflicts are identified by the COW, ICB and Uppsala/PRIO Projects respectively. The post-World War II world starts with 6 wars (COW), 6 crises (ICB), or 17 conflicts (Uppsala/PRIO) in 1946. The number of wars, crises, and conflicts decreased sharply in the early years of the Cold War. After that, we find a steady increase in number during most part of the Cold War period. This has something to do with the corresponding increase in number of nation states in international system. We see some local peaks around late 1940s, 1960s, and late 1970s.

From 1946 to 1988, the highest numbers of wars, crises, and conflicts are recorded in 1982 and 1983 (COW, 22 wars), 1981 (ICB, 18 crises), and 1987 (Uppsala/PRIO, 47 conflicts) respectively. On the contrary, the lowest numbers are recorded in 1946 (COW, 4 wars), 1952 (ICB, 2 crises), and 1955 (Uppsala/PRIO, 13 conflicts.) Among three, the ICB dataset shows most clearly the stable period from the late 1960s to the 1970s, which is generally considered as a period of *Detente*.

In analyzing general trends in location of wars, crises and conflicts from 1946 to 1988, the Uppsala/PRIO dataset is quite illustrative and therefore examined here. See Figure 12 below. Of 112 conflicts happened from 1946 to 1988, conflicts in Europe only occupies 9 %. 63% of the total conflicts occurred in Asia and Africa. Europe almost remained peace-zone throughout this period.



Source: The Uppsala/PRIO Armed Conflict Dataset, Version 3.0.

Concerning the type of wars, crises, and conflicts from 1946 to 1988, the COW dataset finds 22 inter-state wars, 15 extra-state wars, and 77 intra-state wars. The Uppsala/PRIO dataset finds 35 inter-state conflicts, 22 extra-systemic conflicts, 48 internal conflicts, and 7 internationalized internal conflicts. Both COW and Uppsala/PRIO datasets confirm that internal conflict has been the most dominant one throughout the entire post-World War II period, and certainly since the late 1950s. Extra-systemic wars have not been recorded since

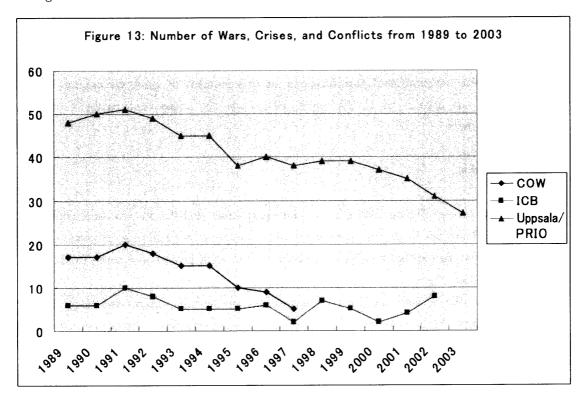
Kikkoujin: Data-Gathering Project on War Conflict in International Relations Field

mid 1970s, which is a reflection of the end of decolonization process. Numbers of interstate wars and conflicts have remained quite low.

In conclusion, despite the arguments made by advocates of "Long Peace" propositions, as Brecher and Wilkenfeld argue, "the post-World War II international system has been characterized by persistent violence in many regions." <sup>38</sup>

#### (3) General patterns of war and conflict from 1989 to 2003

The historical trend in number of wars, crises, and conflicts from 1989 to 2003 is shown in Figure 13.



From 1989, the COW dataset finds 27 wars (to 1997), ICB dataset finds 79 crises (to 2002), and Uppsala/PRIO dataset finds 116 conflicts (to 2003.) We see some turbulence, that is, an increase in number of wars, crises, or conflicts in the early 1990s. The three datasets all confirm that the year 1991 is the most war-prone year. In 1991, the COW dataset records 20 wars, the ICB dataset identifies 10 crises, and the Uppsala/PRIO dataset finds 51 conflicts. The lowest number of wars, crises and conflicts are recorded in 1997 (COW, 5 wars), 1997 and 2000 (ICB, 2 crises), and 2003 (Uppsala/PRIO, 27 conflicts) respectively. Contrary to the "Long Peace" propositions, the numbers of all types of war, crisis, and conflict have decreased sharply since the early 1990s.

<sup>38</sup> Brecher and Wilkenfeld, The Study of Crisis, p.1

As for location of wars, crises and conflicts, of the 116 conflicts in the post-Cold War world identified by the Uppsala/PRIO dataset, 33 % happened in Africa, 27% in Asia, 19% in Europe, 11% in Western Hemisphere (Americas), and 10% in Middle East. Like that of the post-World War II period, distribution of them is also concentrated in Asia and Africa. The 1990s saw a slight increase in number of wars, crises and conflicts in Europe. This is due to the disintegration process of former USSR and Yugoslavia.

Concerning the type of wars and conflicts from 1989 to 2003, the COW dataset identifies 1 inter-state war, no extra-state war, and 26 intra-state wars. The Uppsala/PRIO dataset finds 7 inter-state conflicts, no extra-systemic conflict, 88 internal conflicts, and 21 internationalized internal conflicts. Although intra-state wars or internal conflicts have remained the most dominant ones, we also see the decrease in number of them. Numbers of inter-state wars and conflicts remain very low.

Finally, despite its significant ramifications, at this moment of time, we cannot observe any impact of the attacks of 11 September 2001 upon the subsequent patterns of wars, crises, and conflicts.

#### 4. Conclusion

This survey reviews the current state of data-gathering projects on war and conflict in International Relations field. By examining three major data-gathering projects existing today, it attempts to highlight unique characteristics of each project and some fundamental differences between them.

As mentioned above, there has been increasing data-gathering projects and large amount of researches have been conducted on the basis of these datasets. Although this trend reflects the rising relevance of the scientific and systematic study of conflicts and wars, the field still remains in the infancy stage and war/conflict data-gathering efforts have still been characterized by conceptual confusion and duplications.

Meredith Reid Sarkees and J. David Singer mention as follows:

The existence of so many competing visions of armed conflict is partially due to definitional issues. Each project has developed its own foci and definitions of what constitutes armed conflict, and has utilized different methodologies by which conflict is divided into subcategories. Unfortunately, this proliferation has led to confusion in the discipline, a duplication of efforts, and a situation in which some types of conflict (and some temporal zones) are heavily studies, while others have been ignored or understudied.<sup>39</sup>

<sup>39</sup> Sarkees and Singer, op.cit., p.12.

This is resulting from the fact that the creation of a war/conflict database requires many subjective and value judgments in terms of selection of data source, definition of major concepts and indicators, determination of coding rules and dataset structure, and so on. But as discussed above, although there exist some fundamental differences in definition of key concepts, coding rules and the treatment of the data sources, it can be concluded that the findings of three projects examined here are fairly consistent with each other.

However, this does not necessarily deny the fact that each data-gathering project has its own problems. Among the COW Project's many virtues is its emphasis on strict and transparent operational procedures, but many conflicts never reach the COW limit of 1,000 battle-deaths. As war and conflict move from one type or level to another over time, in studying the life cycle of particular conflict, the UCDP dataset is useful because each armed conflict is coded by type and level for each year. On the other hand, one of the significant criticisms toward the definitions of the UCDP Project is relating to the fact that some of the massacres happened in Rwanda and former Yugoslavia are not treated as battle-related deaths because of the concept "contested incompatibility" of the Project. For an in-depth analysis of crisis including the conflict management technique, the ICB dataset can be a helpful guide. But fatality levels are not given for international crises. Thus, at this moment of time, the researchers and practitioners are required to select and utilize various war/conflict datasets by carefully examining the merits and demerits of each one.

The contemporary data-gathering projects on war and conflict face many fundamental difficulties. Essential differences in data source, definition of concepts, and coding rules and procedures make it difficult to compare the findings of each project rigorously. In addition, without a few exceptions, most of the existing data-gathering projects focus on the post-World War II period as time frame for their analysis. Furthermore, the question of how to fill the void between intrastate conflict and gross violation of human rights caused by various forms of violence is so far not addressed enough. It is vital for these data-gathering projects to attempt to collect and analyze the data on massacres, genocides, or politicides which can be categorized neither as interstate nor intrastate conflict. 43

Still, the Uppsala/PRIO dataset marks the watershed in developing a more refined and integrated theoretical framework of data-gathering project on war and conflict. It is expected that constructive projects and dialogues will be promoted further to give more focus on wars and conflicts in pre-World War II period instead of being given the distinctiveness of the post-World War II world, shed more lights on the various forms of

<sup>40</sup> Gleditsch, Wallensteen, Eriksson, Sollenberg, and Strand, op.cit., p.3.

<sup>41</sup> Sarkees and Singer, op.cit., p.15..

<sup>42</sup> Ibid., p.18.

<sup>43</sup> Minority at Risk Project of CIDCM, University of Maryland is at the forefront of this endeavor. See, http://www.cidcm.umd.edu/inscr/mar/

violence, and investigate more energetically the question of how wars and conflicts start, escalate, and terminate for the sake of the accumulation of scientific and systematic knowledge.

(30, August, 2005)

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