2023

The "Recurrent" War Cycle was used to predict a European war in the period 2022-2026. Who, to date, has undertsood and recognized that this cyclic phenomenon is one of the causes of the current Ukraine-Russia war? It is not too late to start…

The Recurrent War Cycle

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Date	Changes	Note
April 2, 2022	Restructuring of the War Cycle document for submission to appropriate publications	V1
October 2022	Partial rewrite	V2
March 2023	Translation checked and updated	V2 EN

Summary

During research into past recurrences, something of a cycle of wars seemed to emerge. The basis of the cycle of the so-called Recurrent War Cycle was then adjusted to include the main wars of the 20th century.

A cycle of approximately 8 years and 5 months was identified. Much consideration was given to the idea of this War Cycle in order to demonstrate its existence:

- regional contexts

- the actualization of the cycle through the number of war victims

- modeling of the effect of the cycle with an explanation of the outbreak of wars

- predictions of wars

- identification of the main researchers of the periodicity of wars

Predictions were made regarding the risk of war in Europe within the former perimeter of socialist countries, involving a direct or indirect Russian component in the period 2022-2026.

The Russia-Ukraine war came to a head suddenly in February 2022, confirming expectations of an outbreak of war in Europe.

The War Cycle corresponds to a phenomenon involving the amplification and attenuation of wars. The cycle cannot be considered as the single cause of war but as one of the causes of war, invisible to those who are unaware of its existence. The War Cycle itself will never start a war if there are no pre-existing causes of conflict, but it has a demonstrable influence with regard to the outbreak of new wars or when it comes to provoking an escalation or a new period of war within existing conflicts.

The current research and its results are presented here in order to enlighten the reader about the aforementioned War Cycle. The current study should be considered the initial steps toward an avenue of research that, while recognized, nevertheless requires significant additional attention.

The « Recurrent » War Cycle - Page 2 of 84
This is the reference V2 of the current research - Authorization to copy for research assessment
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Introduction

Origin and perspective of the research

The periodicity of wars is a recurrent topic upon which previous scholars of war and peace have not managed to achieve consensus.

The analysis presented here is not the result of intentional research on the periodicity of wars but the indirect result of other research, from which emerged what appeared to be a War Cycle, then estimated to occur every 8.3 years or one third of every 25-year period.

This War Cycle is referred to as the Recurrent War Cycle because it is the outcome of analysis on "Past Recurrences", the seeking of a link between past and future events for the purposes of improving their predictability, particularly of potential crises that seemed unforeseeable. This analysis led to the identification of a notion of Past Recurrences that were probable during certain periods in time[1]. There is a potential and temporal link between the events that have marked history and the resurgence of that past, a link referred to as Past Recurrences. This "probabilistic and temporal" link simply indicates that Past Recurrences are more likely in certain periods than in others, and this allow us to predict possible Past Recurrences and improve conventional predictions.

We have been aware of Past Recurrences for some time. These events were sometimes outbreaks of war, but not exclusively, since the principle is the same for non-war events.

The notion of these Past Recurrences was based on a recurrence period of about 25 years (give or take two years). Accumulating the identified examples caused 3 embryonic 25-year war cycles to appear. These 3 cycles were each around 8 years apart. There appeared to be a single cycle of about 8 years and 4 months (one third of 25 years), rather than 25-year cycles.

This was the starting point for the present study on the Recurrent War Cycle, which came about amidst a previous analysis that had given rise to the notion of a War Cycle of about 8 years and 4 months.

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[1] This is the Recurrence Theory, which indicates that an event that has marked the collective unconscious can be experienced anew every 8 years and 5 months or every 25 years.

Introduction

At that time, the following wars had already been identified:

- India-Pakistan: 1947-1948, 1965, 1971
- Israeli-Arab: 1948, 1956, 1967, 1973, 1982

All these wars can be considered as part of a War Cycle of 8 years and a few months.

As the notion was already based on different regional environments, it was quickly turned to regional contexts, as we will see below.

Accumulating evidence for the Recurrent War Cycle has proven to be an unexpectedly complex exercise. Since 2006, forecasts of wars have been made for the following phases of amplification. In 2021, a European war was expected over the period 2022-2026, the most likely being with a country of the former socialist bloc with a direct or indirect Russian component. The Ukraine-Russia war of 2022 is a confirmation of this. Politicians should at least be informed of this cyclical phenomenon that partially explains the new war.

The objectives here are to inform all those who might be interested, to initiate the adversarial discussion necessary to enrich the initial ideas and to allow those who are willing and able to begin their own complementary research to further advance this subject.

Misunderstandings about the periodicity of wars

Experience has shown that the periodicity of wars provokes reactions that can cause something of an impasse and a failure even to examine the context of the war. This is a form of FAQs of cultural stereotypes on the subject.

- **There can be no periodicity of wars because at least one war will take place during a period of attenuation**
  There will always be wars that do not constitute a demonstration of the War Cycle theory. There seems to be a misconception that all wars necessarily and exclusively take place during amplification phases. A War Cycle does not determine all wars, but it can have an influence on the start and course of certain wars, without being systematic. A war in an attenuation phase does not signify that there is no War Cycle. We should see more wars and escalations during an amplification phase than an attenuation phase, but not solely during an amplification phase.

Introduction

- **Some authors have asserted that there can be no periodicity of wars**

  This is another frequent assertion by various authors. It is a misunderstanding that the authors who have considered such a hypothesis credible and who have conducted such studies are not even cited. Three renowned authors are referenced on page 71. The periodicity of wars does remain a controversial subject because it is not yet a resolved one. Referencing an author to justify the failure to examine another author's research is not an honest process. There are renowned authors who have found the hypothesis of the periodicity of wars to be credible, even if they have not succeeded in demonstrating it beyond doubt.

- **The outbreak of wars is not due to a magical or divine cause**

  For some, a belief in the periodicity of wars presupposes a belief in a magical or divine cause, which they rightly challenge. It is advisable to read the author's work rather than imagining what he believes or incorrectly inferring his intentions.

- **Other misunderstandings**

  There are many other misconceptions. Once a war has begun, as in 2022, many of those involved limit themselves to the military actions to come, as if forgetting that there are causes to the wars. Gaston Bouthoul, the father of polemology, wrote: "If you want peace, know war". Understanding a War Cycle does not mean denying the military reality.

Methods

Conventions of representation of the War Cycle

By convention, we use the following definitions:

- Amplification peak
- Attenuation peak
- Amplification phase
  An amplification phase starts with an increase as far as the amplification peak followed by a decrease to the midline.
- Attenuation phase
  An attenuation phase begins with a decrease toward the attenuation peak followed by an increase to the midline.
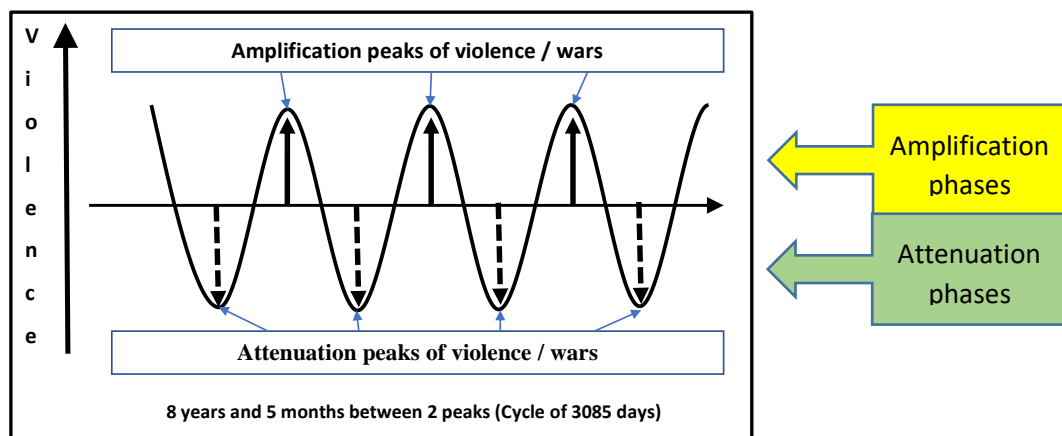

Figure 1 - Conventions of representing the War Cycle

Theoretical and real representation of the cyclic phenomenon

There are no perfect sinusoidal waves in nature. Known cyclical phenomena, such as the solar cycle, have variations in periodicity and amplitude from one peak to the next, and the physical phenomenon that could be at the origin of this War Cycle certainly does. For the study presented here, we use a sinusoidal wave that represents an average periodicity and an average amplitude. The real representation is different, but in order to arrive at a real representation, we will first have to understand the origin of this phenomenon.

Methods

Definitions

War:

War is defined as an armed conflict between several formal political groups, such as a state or a militia or an armed group, or informal groups, such as a rioting population that then begins a civil war

Major war:

A war that by one or more criteria (destruction, involvement of troops, duration, death and injuries, or impact) has a marked or *major* importance compared to other wars.

Periodicity of the War Cycle used in this study

The point of departure was adjusted to include the main wars of the 20th century. By successive approximations, the working basis was 3,085 days, or 8 years, 5 months and 13 days. The date of the outbreak of the First World War was taken as T0 of the cycle at a peak of amplification.

The value of 3,085 days is approximate and considered an average value of periodicity that varies from peak to peak. It is acknowledged that the periodicity and the amplification and attenuation peaks will be adjusted either when the origin of this phenomenon is understood or when another study spanning several centuries has been completed and verified.

An accurate average cycle value is more important to historians than those using it to forecast the risks and periods of war in the next few years, like this study. Given the uncertainty by several months of predictions using the War Cycle, a margin of error of 10 to 20 days on the value of 3,085 days has no consequence on the predictions that can be made, whereas the same uncertainty will have consequences if the War Cycle is studied and applied several centuries earlier.

The Recurrent War Cycle

In this document, the expression "War Cycle" is to be understood as the Recurrent War Cycle. It is recognized that there may be other War Cycles and that a name to indicate that this study is about this particular War Cycle would be more precise.

Furthermore, while it is acknowledged that a basic cycle of 3,085 days will produce other multiple cycles, or cycles of about 17 years, 25 years or 50 years, this study is limited to the basic cycle. A

relatively short cycle length of about 8 years and 5 months allows its use for 2- to 5-year forecasts, whereas a longer cycle length (25 years) would allow only rare predictions.

This study is therefore limited to the Recurrent War Cycle with a periodicity of 3,085 days whilst fully acknowledging the existence of other periodicity values for these wars.

Temporal roots of the War Cycle

The War Cycle discussed here is firmly rooted in time. The T0 of the amplification peaks is the date of the outbreak of the First World War. This is an input datum and could be changed later, as well as the periodicity value of 3,085 days.

How to demonstrate a War Cycle

We need to show that amplification phases have an effect on wars, either by triggering new wars or by escalating or expanding pre-existing conflicts. We can imagine an opposite effect during attenuation phases and try to assess whether the attenuation effect is sufficient to promote peace.

What characteristics of wars do we take into account in order to show the effect of the amplification phase? War outbreak dates are the first data points to be taken into account when studying war periodicity (*in accordance with the recommendations of Gaston Bouthoul*)[2], but this does not exclude the consideration of other aspects.

Logically, a War Cycle should trigger more wars during amplification phases than attenuation phases.

It is important to note that this study does not claim to demonstrate that 100% of wars are governed by a War Cycle. It is therefore wholly possible that wars break out during attenuation phases, but this does not disprove the War Cycle. Demonstrating the theory will therefore be based, in part, on some statistical elements, or the study of the dates of the outbreak of wars, and supplemented by descriptive elements to allow us to understand the contexts of the different cases.

War outbreak dates as reference values with escalations dates

Initially, the war outbreak dates were taken into account to evaluate the periodic cycle. As the study progressed, it became apparent that the War Cycle can also favor escalations or expansions of war. An outbreak date during an attenuation phase followed by a war escalation during the next amplification

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[2] Gaston Bouthoul is a French sociologist who founded polemology.

The « Recurrent » War Cycle - Page 8 of 84
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Methods

phase is also indicative of the effect of the War Cycle. The dates of the escalation or expansion of wars are important. The amplification phase may stimulate new wars or an international escalation or expansion of an existing war, and this must be taken into account. From a methodological point of view, this introduces a complexity to our understanding since certain dates of outbreak may be significant while others are not.

Methodologically, the statistics will cover the dates of outbreaks. In the absence of a single general method applicable to all types of events (outbreak of war, escalation), the escalation dates will be taken into account using a descriptive method or in the form of a graphic ***materialization/visualization of the War Cycle.***

Limitations of a purely statistical approach

The purely statistical strategy can only be applied to clearly defined events, such as outbreaks. It cannot take into account war outbreaks during an attenuation phase and subsequent escalations during the following amplification phase. From a descriptive point of view, the latter case is as important as the outbreak of a war during an amplification phase.

Statistical and descriptive approach

Significant studies from other authors on the periodicity of wars are statistical and use the dates on which war or battle started, particularly those by Edward R Dewey (see *Renowned authors who have discussed the periodicity of wars on page 71*).

These statistical approaches are necessary but insufficient. When forecasting wars or escalations, it is necessary to identify types of events other than the outbreak of war and to adopt a descriptive approach. The approach that has been followed here is firstly descriptive, which has allowed realistic hypotheses to be put forward that could be used for predictions, with supplementing statistical data.

These statistical and descriptive approaches should not be set against each other and should not be seen as exclusive, but rather as complementary and necessary. What is presented here, in a descriptive way, must be validated by those who consider themselves concerned by such studies before statistical research is conducted on a larger scale, with a redefining of the characteristic events of these statistical studies.

By focusing on the descriptive approach, the author has attempted to lay the groundwork for potential further research.

Methods

A purely statistical or descriptive approach would only address part of the phenomenon. All presented information must attempt to shed light from different angles on a cyclical phenomenon that is not limited to a binary understanding and whose description proved more complex than it first seemed.

CONTEXT: Visual presentation of regional contexts

To facilitate understanding, a visual presentation was provided, grouped into mostly regional contexts. The aim is to show that the same cycle applies to different regions with significant results. These contexts are also used to analyze the risks of war in the short or medium term.

CONTEXT: Frame of Reference

All contexts were from the same frame of reference, representing the same amplification and attenuation peaks (see *Appendix A: CONTEXT: Reference Frame* on page 5)

CONTEXT: Calculating deviations from the nearest amplification peak

The disadvantage of a simple visual presentation of context is the lack of a numerical measurement indicating how far from the peak the event occurred and in which phase (amplification or attenuation). A way to measure the deviation from the theoretical amplification peak was therefore established.

Idp= Cycle half-period interval in days

Dp= Date of the nearest amplification peak

Dg= Date of the event (outbreak or escalation)

Deviation from peak amplification = $(Dg - Dp) / Idp$

This deviation is expressed in months or as a percentage.

As a percentage:

- A deviation of 0% means that the event is on an amplification peak.
- A deviation of 100% means that the event is on an attenuation peak
- A negative value indicates that the event took place before the peak
- A deviation value from -50% to +50% (passing through 0) means that the event date (outbreak or escalation) is in the amplification phase.

These deviations give a numerical indication for each war and can give an average of the deviations in a given context. This indicator is specific to this study.

This deviation is intended to indicate how dates relate to peaks.

MODELING the outbreak of wars and the effect of the War Cycle

Why do wars break out and how does the War Cycle influence them? To answer these questions, it is necessary to model the effect of the War Cycle on wars. Modeling is only one way to explain the observed phenomenon, a means of forming hypotheses, confronting the data, then determining the rules that allow us to make predictions.

A purely statistical approach to the dates of war outbreak could prove a War Cycle without any explanation of the causes behind the wars.

In a descriptive approach, this explanation, as well as an understanding of the effect of the cyclical phenomenon, are fundamental. It is both an input when it comes to the description and an output, because there is no known equivalent and because the question of the causes of wars remains a sensitive subject for those involved in the study of wars.

We could not understand the effect of a War Cycle without an idea of the causes that lead to the outbreak or escalation of wars. Some might consider the modeling as a baseless hypothesis, whereas it is in fact an indispensable part of understanding the effect of a War Cycle.

MATERIALIZATION/Visualization of the War Cycle in graphic form

The War Cycle probably has an effect on violence, whether it be war-related or other types of violence. Can violent measures represent the War Cycle in material/visual form? In other words, can casualty records offer us a semblance of a sinusoid curve?

If this materialization/visualization is possible, for example through violent measures or victim numbers, it could further confirm the existence of the War Cycle. It is also important to understand that the phenomenon does not only affect leaders of war but all those affected by the conflict. This arguably shows that there is indeed a mass effect, even if we do not understand how that is possible.

Multiple methods and consistency of different demonstrations

Methods

The various methods used provide different insights that may seem contradictory. For example, the date of a war's outbreak is considered an indispensable validating factor of the effect of the amplification phase. The war contexts discussed here are mainly based on these war outbreak dates, while bringing to light some other events. The outbreak of a war during an attenuation phase, when looking at context, is an event that contradicts the effect of the War Cycle; however, that same war outbreak during an attenuation phase becomes a confirmatory factor if the materialization shows a similarity to the theoretical curve of the War Cycle.

The author humbly acknowledges that he has not found a single method to demonstrate the cyclical phenomenon in question. These are, therefore, different insights that may seem contradictory, somewhat similar to trying to represent a 3-dimensional geometric space; we need to use several 2-dimensional drawings to be able to grasp it fully, which is the mental reconstitution of the different 2-dimensional drawings to understand the 3-dimensional geometric space. The complexity of the phenomenon demands more than a simple and unique representation.

Results

Structuring of the results

The results are structured into different parts:

- Dates of the amplification phases of the War Cycle

- Statistical demonstration throughout the wars of the 20th century

- War contexts

- Materialization of the War Cycle

- Modeling the effect of the War Cycle

- Forecasting of war

These different results reflect different and complementary approaches and methods, mainly encapsulated in the modeling.

The « Recurrent » War Cycle - Page 13 of 84
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Dates of the amplification phases of the examined War Cycle

As previously indicated, the periodicity is 3,085 days and the T0 of the amplification peak is the date of the outbreak of the First World War: July 31, 1914. From this information, the beginning and end of the amplification phases are calculated.

It is acknowledged that the basis of the periodicity is approximate and that, in reality, the cycle as calculated corresponds merely to average values because the amplification peaks are deviated from either side in each phase.

It is this theoretical and approximate War Cycle that will be used to verify whether the notion corresponds to the reality of wars since 1900.

Several critics have commented that a study over several centuries would be necessary. Pragmatically speaking, I ask *how would a study over several centuries serve if, according to such critics, there has been no visible War Cycle since 1900, even though this is the most significant period?* Let us start with the data available since 1900; the study can be extended to include other centuries if the results require it.

Amplification phases since 1900	
Start	End
January 8, 1904	March 30, 1908
June 16, 1912	September 9, 1916
November 29, 1920	February 19, 1925
November 5, 1929	August 1, 1933
October 21, 1937	January 11, 1942
April 2, 1946	June 23, 1950
September 9, 1954	December 3, 1958
February 22, 1963	May 15, 1967
August 4, 1971	October 25, 1975
January 14, 1980	April 5, 1984
June 25, 1988	September 15, 1992
December 5, 1996	February 25, 2001
May 17, 2005	August 7, 2009
October 27, 2013	January 17, 2018
April 8, 2022	June 29, 2026
September 18, 2030	December 9, 2034
February 28, 2039	May 21, 2043
August 10, 2047	October 31, 2051

Statistical demonstration throughout the wars of the 20th century

The simplest and most logical method is to state that if there exists a War Cycle that works to the advantage of war outbreak, then more wars should start during the amplification phases than during the attenuation phases.

To verify this, we must consider a list of the wars of the 20th century as defined by people other than the author and then count - for each phase of amplification and attenuation - the number of wars that started; then, after adding up the number of wars during each phase, if we find more wars during the phases of amplification than attenuation, we can confirm that the War Cycle favors wars.

For this to be credible, a pre-existing list of wars as uncontroversial as possible must be used. The list of wars from the Correlates of WAR (COW) V4 project[3] seemed credible and so was used for the verification process. As the list only contains the years of the wars, the amplification and attenuation phases selected are also counted in full years, which is sufficient for an initial verification of the principle of this method.

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[3] Website: correlatesofwar.org

RESULTS

According to the COW V4 war list			
Attenuation phase		**Amplification phase**	
Years	Number of wars	Number of wars	Years
1900 1903	9	16	1904 1907
1908 1911	10	14	1912 1916
1917 1920	24	11	1921 1924
1925 1928	7	13	1929 1933
1934 1937	8	5	1938 1941
1942 1945	5	17	1946 1949
1950 1954	11	11	1955 1958
1959 1962	10	16	1963 1966
1967 1971	18	21	1972 1975
1976 1979	21	16	1980 1983
1984 1987	9	30	1988 1992
1993 1996	13	27	1997 2001
TOTAL	**145**	**197**	

Period	Attenuation	Amplification	Total
1900 à 2001	145	197	342
	42%	58%	
1900 à 1941	58	59	117
	50%	50%	
1942 à 2001	87	138	225
	39%	61%	

RESULTS

The first analysis of this result seems satisfactory and appears to show that there are more wars during the amplification phases (197 or 58%) than during the attenuation phases (145 or 42%).

However, the figures from 1900 to 1941 reveal that there are as many wars in either column, and the amplification phase from 1938 to 1941 shows that there are only 5 wars identified during the amplification phase versus 8 during the preceding attenuation phase of 1934 to 1937. If we then look at the list *COW Wars V.4*, we see that the Second World War gives rise to only one war and that several of the years during the Second World War saw no wars, whereas a whole series of small wars gives rise to numerous wars during the preceding attenuation period. Yet, from 1900 to 1941, there are two world wars fully situated in phases of amplification that give credibility to the War Cycle that has been identified.

Different tests have been carried out with different war lists published by different authors, the results of which are variable but inconsistent, depending on the author's definition of war. As such, this method deprives researchers seeking to confirm the reality of the War Cycle of a reliable verification process.

The statistical results are good, but a descriptive analysis of the numbers generated by this method would lead to different results from each researcher using different war lists. If all wars are combined, from smallest to largest, a statistical analysis cannot demonstrate the War Cycle.

This example of a statistical demonstration shows that the use of a list of wars can lead to aberrations: a few secondary wars during an attenuation phase are more important than a world war that is unique because it encompasses all the others. Using war outbreak dates in order to identify the events to be examined for a statistical study is not sufficient. With major wars, the phenomenon is visible, and as the notion of a major war is not clearly defined, such an exercise may seem questionable and may even appear selective of the data that will ensure a sound statistical result. However, it is essential to find a way of filtering or weighting wars in order to demonstrate the theoretical War Cycle. This is a prerequisite for lists of wars that can be used for a purely statistical approach.

The notion of *context* used here has helped to make the War Cycle credible in different environments.

The « Recurrent » War Cycle - Page 17 of 84
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CONTEXT

To be credible, the demonstration of a War Cycle must be based on data from different regions, which we are referring to as war *contexts*.

The contexts were initially chosen due to their recurrent conflicts that have provoked several wars (the Arab-Israeli or Indo-Pakistani conflict), or because they are regions or countries with a "structural" weakness that regularly provokes conflicts (Europe, Lebanon); and final, a global context was also included.

- Arab-Israeli conflict
- Indo-Pakistani conflict
- Europe
- Lebanon
- the World (global)

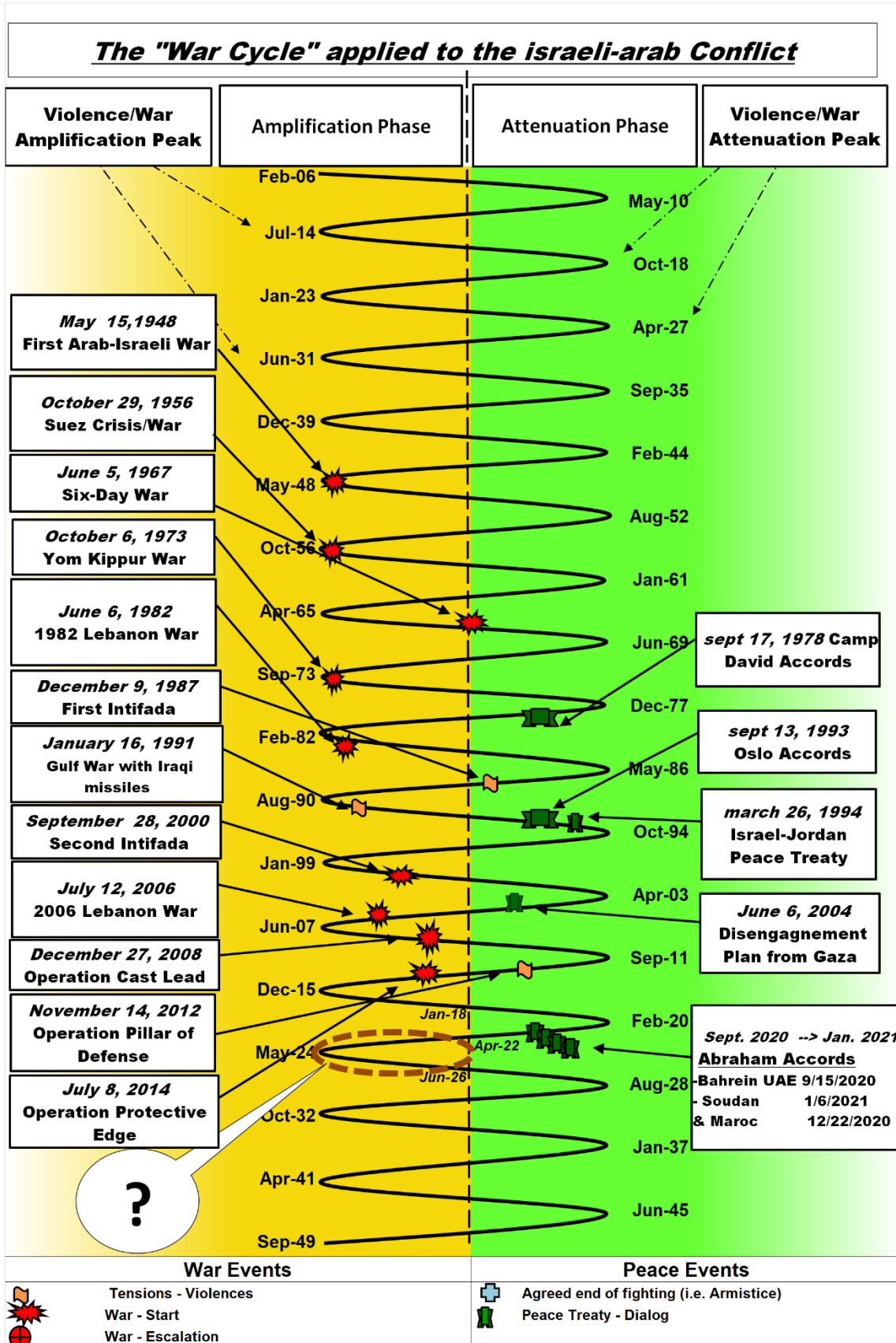Some contexts were considered insignificant:

- South America

  There are too few wars between Latin American countries to be significant.

- Africa

  There are too many wars. Including an African context would require selecting only certain wars among all. Specific research should be conducted for Africa given the more complex situation and high number of conflicts and wars.

Other contexts could be examined, which, if done by other researchers, would demonstrate their understanding of this approach.

The visual presentation goes toward both partially justifying the War Cycle by showing the past statistical distribution and extrapolating the cycle into future phases in the form of predictions, generally indicated by a "?". In addition, statistical data are presented for each context, as set out in Methods.

The context of the Arab-Israeli conflict

The "War Cycle" applied to the israeli-arab Conflict

Violence/War Amplification Peak	Amplification Phase	Attenuation Phase	Violence/War Attenuation Peak

War Events | **Peace Events**

Tensions - Violences | Agreed end of fighting (i.e. Armistice)
War - Start | Peace Treaty - Dialog
War - Escalation

The « Recurrent » War Cycle - Page 19 of 84

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CONTEXT

Figure 2 - Arab-Israeli Context

Deviation Table for the Israeli-arab conflict

Event	Evt Date	Peak Date	Deviation in months (vs Peak)	Deviation in % (vs Peak)
First Arab-Israeli War	15-May-48	13-May-48	0,1	0%
Suez Crisis/War	29-Oct-56	23-Oct-56	0,2	0%
Six-Day War	05-Jun-67	04-Apr-65	26,0	51%
Yom Kippur War	06-Oct-73	14-Sep-73	0,7	1%
1982 Lebanon War	06-Jun-82	24-Feb-82	3,4	7%
First Intifada	09-Dec-87	06-Aug-90	-31,9	-63%
Gulf War with Iraqi missiles	16-Jan-91	06-Aug-90	5,4	11%
Second Intifada	28-Sep-00	16-Jan-99	20,4	40%
2006 Lebanon War	12-Jul-06	28-Jun-07	-11,5	-23%
Operation Cast Lead	27-Dec-08	28-Jun-07	18,0	36%
Operation Pillar of Defense	14-Nov-12	08-Dec-15	-36,8	-73%
Operation Protective Edge	08-Jul-14	08-Dec-15	-17,0	-34%

Average of the absolute deviation values, including the 3 tension cases	10	20%
Average of the absolute deviation values, without the 3 tension cases	14	28%

Table 2 - Arab-Israeli deviation table

How does this context help to demonstrate the War Cycle?

First of all, it is necessary to verify whether the wars indicated are indeed those recognized for this conflict. Three of the wars are presented by some authors as tensions and by others as wars: the first Intifada, the Iraqi missiles on Israel during the Gulf War, and the "Pillar of Defense" operation.

Taking the unfavorable case where these episodes are considered as wars, 75% of the wars (9 out of 12) are triggered during amplification phases.

The Israeli-Arab context helps to demonstrate the War Cycle

Analysis of the Arab-Israeli conflict based on context

Situation of the Arab-Israeli conflict in the War Cycle

The Arab-Israeli conflict remains the most notable case of the War Cycle, both in terms of its conflictual and peaceful episodes.

Until now, peace initiatives have always taken place during attenuation phases, only to be contested to a greater or lesser degree during the next amplification phase. Some agreements remain in place, others never reach conclusion (for example Camp David agreements or Oslo agreements).

During the 2013-2017 amplification phase, this conflict did generate a war, as is usually the case.

During the 2018-2022 attenuation phase, the conflict generated peace and normalization agreements, as is sometimes the case.

The War Cycle in terms of the Arab-Israeli conflict is still relevant, even if it seems to be attenuated.

The recurrence of the conflict is expected to cease in the 2030s, when the Arab world undergoes a regional reconfiguration with Israel, which will then be considered a regional state on a par with the other states of the Arab League. While that time is approaching, it is not yet a reality and will not prevent periods of unrest during the period 2022 to 2026.

2019 to 2022 predictions

Theoretically, this was the period in which a peace initiative could have taken place, even partial. In the first quarter of 2019, there was no such prospect, but with the Trump-Netanyahu pairing, there was an American peace attempt and the Abraham Accords in 2020, resulting in an accord between Israel and the United Arab Emirates and Bahrain, followed by an agreement in January 2021 with Sudan. The normalization of relations between Israel and Morocco took

The « Recurrent » War Cycle - Page 21 of 84
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place in December 2020, following a deal between the United States and Morocco over Western Sahara.

There was, then, a partial peace initiative, as expected, although it was not clear at the beginning of the attenuation period where such an initiative would come from.

The recurrent conflict between Gaza and Israel tends to produce more and more incidents that occur as much in the amplification phase as in the attenuation phase. This is indicative of what appears to be, so far, a dead-end conflict with no other negotiation than military power struggles on both sides that only serve to gain a little time without bringing any future or regional balance. Consequently, during the period 2013-2022, the War Cycle is less pronounced.

2022-2026 predictions for the 2024 peak

While the Abraham Accords and normalization with several Arab states may give the impression that the Arab-Israeli conflict is over, the possibility of upheavals cannot be excluded, especially on the Palestinian side. The Arab-Israeli conflict is not over and it has not reached a point of equilibrium that would make it unsusceptible to the War Cycle.

The Arab-Israeli conflict has often produced agreements during the attenuation phase that have been challenged during the subsequent amplification phase. What will remain of the Abraham Accords? Are they stronger than the Palestinian conflict? There will be something left of these agreements, but it is a misapprehension to believe that nothing will happen in the next amplification period.
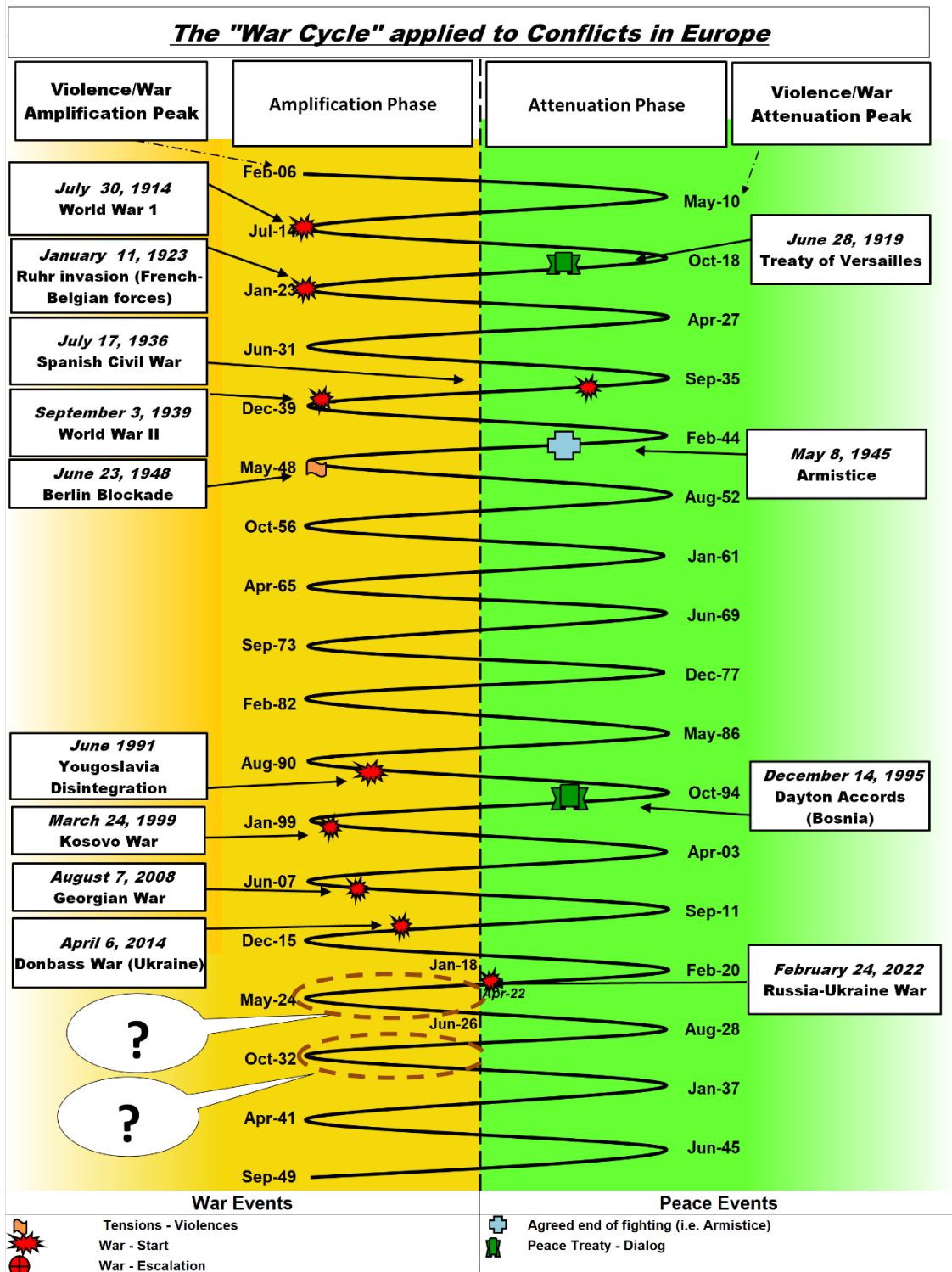
There is a 90% chance of war during the current 2022-2026 period, but the specifics are unknown. The potential contenders are Iran (indirectly through third parties), the Palestinians and Syria, as well as any combination of the three. It will most likely take place during 2023-2025, a year earlier or later than the expected peak, but also much later (as in 2014).

Could that war be avoided? Perhaps, if we had the means to launch something a little serious that would start no later than mid-2022 and last as long as it takes to start building something and give a perspective to the Palestinian populations that no longer have any. The international mood of 2022 does not favor such initiatives, which simply seem unreal and irrelevant in relation to the Ukraine-Russia war that polarizes the biggest international risks for the coming years.

The « Recurrent » War Cycle - Page 22 of 84

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European context (from the Atlantic to the Urals)

These are conventional wars that take place on European soil. The advantage of limiting the scope to wars on European soil is that it introduces an unambiguous filter.

The "War Cycle" applied to Conflicts in Europe

Violence/War Amplification Peak	Amplification Phase	Attenuation Phase	Violence/War Attenuation Peak

	Feb-06		
July 30, 1914 World War 1		May-10	
	Jul-14		
January 11, 1923 Ruhr invasion (French-Belgian forces)		Oct-18	June 28, 1919 Treaty of Versailles
	Jan-23		
July 17, 1936 Spanish Civil War		Apr-27	
	Jun-31		
September 3, 1939 World War II		Sep-35	
	Dec-39		
June 23, 1948 Berlin Blockade	May-48	Feb-44	May 8, 1945 Armistice
		Aug-52	
	Oct-56		
		Jan-61	
	Apr-65		
		Jun-69	
	Sep-73		
		Dec-77	
	Feb-82		
		May-86	
June 1991 Yougoslavia Disintegration	Aug-90	Oct-94	December 14, 1995 Dayton Accords (Bosnia)
March 24, 1999 Kosovo War	Jan-99	Apr-03	
August 7, 2008 Georgian War	Jun-07	Sep-11	
April 6, 2014 Donbass War (Ukraine)	Dec-15	Feb-20	February 24, 2022 Russia-Ukraine War
	Jan-18 / Apr-22		
?	May-24	Aug-28	
	Jun-26		
?	Oct-32	Jan-37	
	Apr-41	Jun-45	
	Sep-49		

War Events		Peace Events	
	Tensions - Violences		Agreed end of fighting (i.e. Armistice)
	War - Start		Peace Treaty - Dialog
	War - Escalation		

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CONTEXT

Figure 3 - Contexts of wars on European soil

Deviation Table for the wars in Europe

Event	Evt Date	Peak Date	Deviation in months (vs Peak)	Deviation in % (vs Peak)
World War I	30-Jul-14	31-Jul-14	0,0	0%
Ruhr Invasion (French-Belgian Forces)	11-Jan-23	10-Jan-23	0,0	0%
Spanish Civil War	17-Jul-36	02-Dec-39	-40,5	-80%
World War II	03-Sep-39	02-Dec-39	-3,0	-6%
Yougoslavia Disintegration	01-Jun-91	06-Aug-90	9,8	19%
Kosovo War	24-Mar-99	16-Jan-99	2,2	4%
Georgian War	07-Aug-08	28-Jun-07	13,3	26%
Donbass War (Ukraine)	06-Apr-14	08-Dec-15	-20,1	-40%
Russia-Ukraine War	24-Feb-22	19-May-24	-26,8	-53%
Average of the absolute deviation values			13	25%

Table 3 – Europe deviation table

How does this context help to demonstrate the War Cycle?

77% of these wars (7 out of 9) began during amplification phases

The European war context helps to demonstrate the War Cycle

Analysis of Europe based on context

Situation of Europe in the War Cycle

After the Arab-Israeli conflict, the European context is the most notable case. These two geographical phases and their wars are fundamental to demonstrating and using the War Cycle.

Europe should be considered as the geographical region that stretches from the Atlantic to the borders of Russia, or the area covered by the EU, NATO and the member countries of these institutions. Under this definition, wars that have taken place in Europe were considered for the

present study. The Falklands War also broke out during an amplification phase but was not included since it did not take place on European soil, as with the Suez crisis in 1956 and the Gulf War in 1990. There are other wars in which Europeans have been involved that support the War Cycle, but the scope here is restricted to conventional wars that took place in geographical Europe.

The context of conventional wars on European soil is useful because it naturally filters the conflicts. Taking all other European wars into account would require only considering a few wars, a more dubious proposition as their inclusion would be determined solely by the author.

For almost 45 years (1945 to 1990), in this context of wars in Europe, there were no conventional wars on European soil despite the East-West division and antagonism; then, the disintegration of the socialist blocks caused the reappearance of wars that were systematically triggered during the amplification phases.

2022-2026 predictions around the 2024 peak

Below you will find an extract of the forecast as of December 30, 2021. It is included as a reminder of possible predictions before the outbreak of the Russia-Ukraine war.

Extract of prediction updated on December 30, 2021 - Start

It is likely (80-90%) that there will be a war during this period. The most likely period is 2023-2025.

This war will be one of the following:

- *An escalation of an ongoing or dormant conflict (such as Ukraine, Georgia, or a potential conflict previously identified by the OSCE)*
- *A new conflict that will be amplified during this period (as was the case for the Ukrainian conflict that did not pre-exist before 2013 but appears to have been amplified by this phenomenon in 2014)*

The « Recurrent » War Cycle - Page 25 of 84
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CONTEXT

It is most likely that:

- *It will be in a country of the former socialist bloc (in the broad sense, USSR and Yugoslavia and other socialist countries)*
- *There will be an indirect or direct Russian component*

....

Without geopolitical progress, we can already imagine tensions and wars around 2024, similar to those we experienced in 2008 and 2014 but probably on a larger scale.

__Extract Prediction updated on December 30, 2021 - End__

After the outbreak of the Russia-Ukraine war:

The war started just before the amplification phase, which is not a good sign. The War Cycle does not provide information on the conduct of operations and the outcome of military operations. The peak of amplification is set to be in 2024, which may result in aggravation or a permanent crisis lasting several years. Much will and imagination will be required to find a new Europe-Russia balance after the current conflict.

In addition to the War Cycle, there is an important phenomenon that explains Russia's behavior since 2014, that of Past Recurrences [4]. The Recurrence, from the fall of the Berlin Wall and the dissolution of the USSR of 1989, began in 2014. It is a "reverse recurrence", which means that as time goes by, Russia is rebuilding and reasserting itself as if it had become the USSR or an equivalent power once again. What we are seeing in 2022 can be difficult to believe: that Russia believes itself to be the USSR, acts as such, and is provoking a wholesale return of all of Europe and Russia to a time when relations were minimal between the USSR and the Western world, and tension was rife. Russia is returning to the ways of the USSR, in censorship, the restriction of freedoms and in the disproportionate nature of its objectives, while elsewhere, the antagonism of the Cold War is re-emerging. This phenomenon of reverse recurrence is what unconsciously guides Russia today. This is not elaborated in this document.
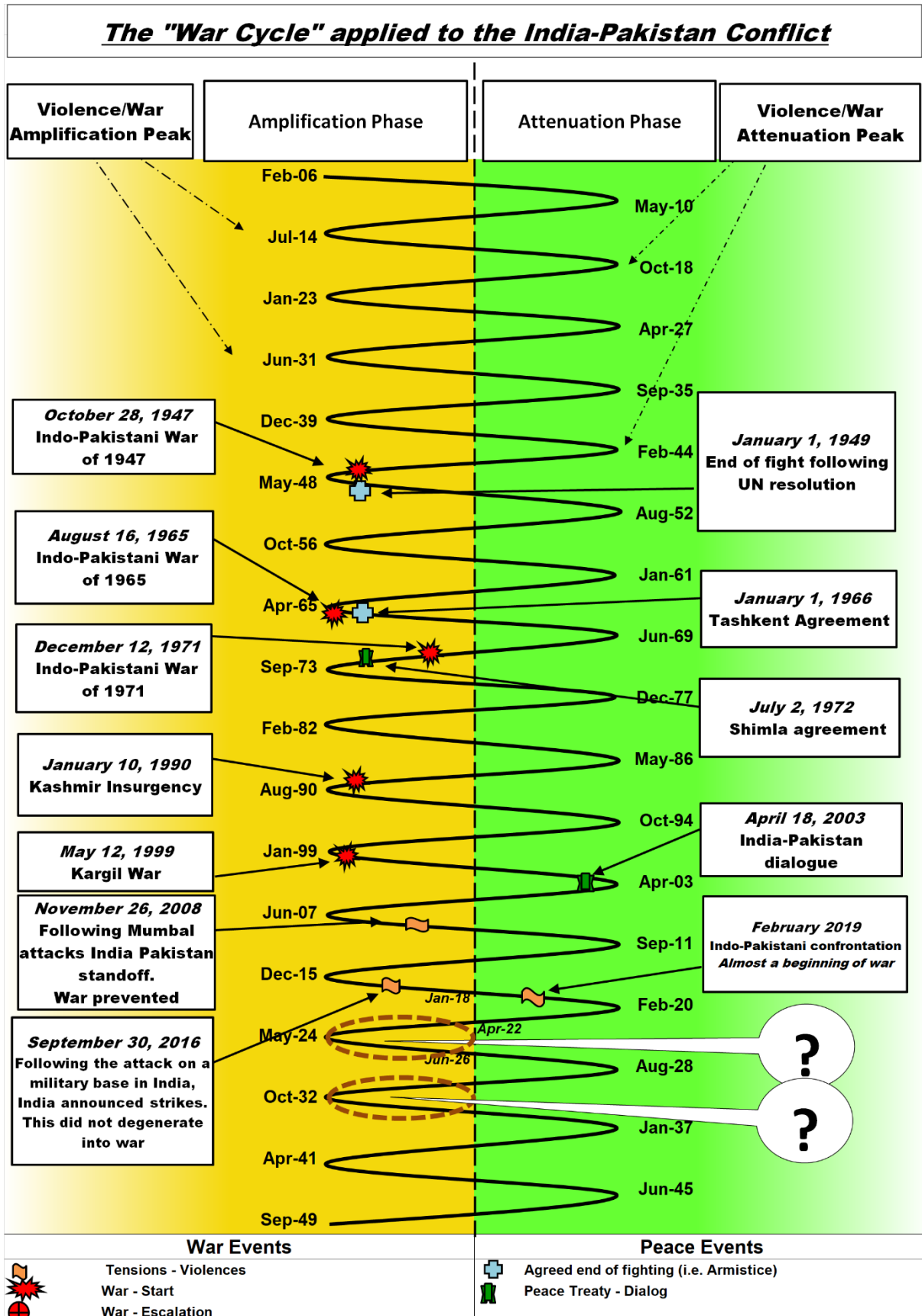
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[4] Theory of Recurrence. The War Cycle is one of the applications of the Theory of Recurrence.

Given that this war began just before the amplification phase, it is likely that it will last several years, with the most difficult phase probably occurring in 2023 and 2024.

The « Recurrent » War Cycle - Page 27 of 84
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India-Pakistan context

The "War Cycle" applied to the India-Pakistan Conflict

Violence/War Amplification Peak	Amplification Phase	Attenuation Phase	Violence/War Attenuation Peak

Feb-06
May-10
Jul-14
Oct-18
Jan-23
Apr-27
Jun-31
Sep-35
Dec-39
Feb-44

October 28, 1947
Indo-Pakistani War of 1947

May-48

Aug-52

January 1, 1949
End of fight following UN resolution

August 16, 1965
Indo-Pakistani War of 1965

Oct-56

Jan-61

Apr-65

Jun-69

January 1, 1966
Tashkent Agreement

December 12, 1971
Indo-Pakistani War of 1971

Sep-73

Dec-77

July 2, 1972
Shimla agreement

Feb-82

May-86

January 10, 1990
Kashmir Insurgency

Aug-90

Oct-94

April 18, 2003
India-Pakistan dialogue

May 12, 1999
Kargil War

Jan-99

Apr-03

November 26, 2008
Following Mumbai attacks India Pakistan standoff.
War prevented

Jun-07

Sep-11

February 2019
Indo-Pakistani confrontation
Almost a beginning of war

Dec-15

Jan-18

Feb-20

September 30, 2016
Following the attack on a military base in India, India announced strikes. This did not degenerate into war

May-24

Apr-22

?

Jun-26

Aug-28

?

Oct-32

Jan-37

Apr-41

Jun-45

Sep-49

War Events		Peace Events	
	Tensions - Violences		Agreed end of fighting (i.e. Armistice)
	War - Start		Peace Treaty - Dialog
	War - Escalation		

The « Recurrent » War Cycle - Page 28 of 84

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Figure 4 - India-Pakistan context

Deviation Table for the Indo-Pakistani conflict

Event	Evt Date	Peak Date	Deviation in months (vs Peak)	Deviation in % (vs Peak)
Indo-Pakistano War of 1947	28-Oct-47	13-May-48	-6,5	-13%
Indo-Pakistani War of 1965	16-Aug-65	04-Apr-65	4,4	9%
Indo-Pakistani War of 1971	12-Dec-71	14-Sep-73	-21,1	-42%
Kashmir Insurgency	10-Jan-90	06-Aug-90	-6,8	-13%
Kargil War	12-May-99	16-Jan-99	3,8	8%
Average of the absolute deviation values			9	17%

Table 4 - Deviations for the Indo-Pakistani conflict

How does this war context help to demonstrate the War Cycle?

100% of these wars are triggered during amplification phases

The context of the Indo-Pakistani conflict helps to demonstrate the War Cycle

Data

The episodes of war included herein are factual, whereas the periods of tension that have been cited are more debatable.

Since the discovery of the War Cycle in 1999, there have been no wars, but some incidents of varying significance have taken place.

This the only recurring conflict since the discovery of the War Cycle that appears limited to the existence of tension with no escalation to war.

2022-2026 predictions

There have been no wars since 1999, but as this recurring conflict is illustrative of the War Cycle, the context remains relevant, even if the conflict is more one of tension than war.

The « Recurrent » War Cycle - Page 29 of 84
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CONTEXT

However, in the absence of serious negotiations seeking to find a new viable political balance between the two countries, we believe that there will be a war one day, most likely during a period of amplification (e.g. a 2024 or 2032 amplification phase) but not exclusively. As the restraint dwindles, the risk becomes once again real and merits ongoing attention.

In addition, Hindu nationalism favors escalation. The period from 2024 (April 2022 to June 2026) is likely to be particularly turbulent in light of the episodes of tension witnessed since 2019. Hindu-Muslim antagonism has increased and tensions are rising between India and Pakistan, even during the attenuation phases, making the risk of war greater in the next amplification phase of 2022-2026.
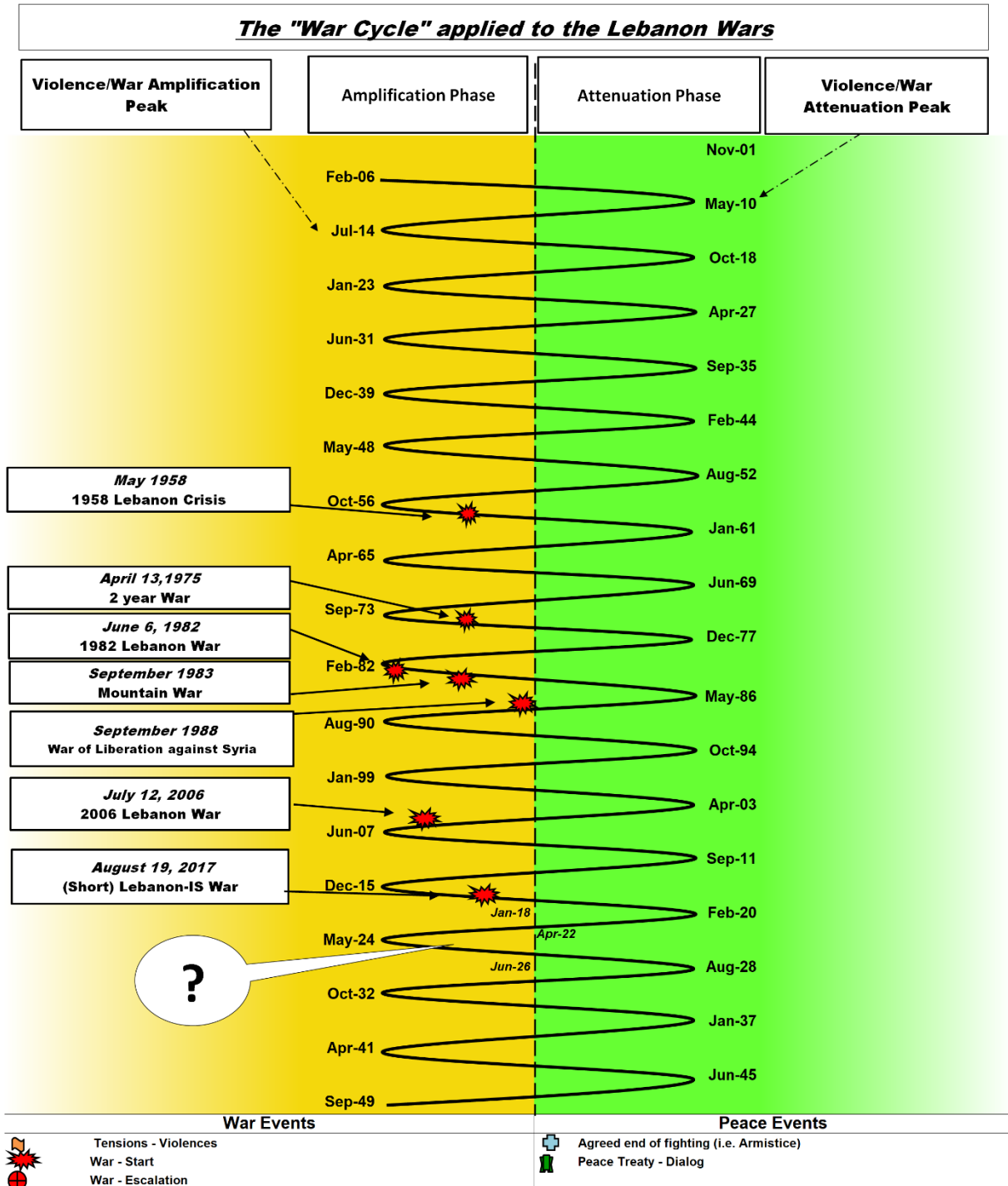
Lebanon context

Figure 5 - Lebanon context

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Deviation Table for Lebanon

Event	Evt Date	Peak Date	Deviation in months (vs Peak)	Deviation in % (vs Peak)
1958 Lebanon Crisis	15-May-58	23-Oct-56	18,7	37%
2 year War	13-Apr-75	14-Sep-73	18,9	37%
1982 Lebanon War	06-Jun-82	24-Feb-82	3,4	7%
Mountain War (1983-1984)	15-Sep-83	24-Feb-82	18,7	37%
War of Liberation against Syria	15-Sep-88	06-Aug-90	-22,7	-45%
2006 Lebanon War	12-Jul-06	28-Jun-07	-11,5	-23%
(Short) Lebanon-ISiS War 17	19-Aug-17	08-Dec-15	20,4	40%
Average of the absolute deviation values			16	32%

Table 5 - Differences in the wars in Lebanon

How does this context help to demonstrate the War Cycle?

100% of these wars are triggered during the amplification phases

The Lebanon context helps to demonstrate the War Cycle

The Data

If the data presented for the other contexts are reasonably accessible to most, those specific to Lebanon are more difficult due to a series of war episodes that were not always well known and sometimes a topic of controversy for the very people involved.

Four of these data points are indisputable: the 1958 crisis, the beginning of the 1975 Lebanese war, and the first and second Israeli wars in Lebanon.

Two of them are not always known as wars and do not necessarily appear to be new wars: the Mountain War and the War of Liberation against Syria. These can be considered as wars within wars or as a new episode of escalation, which amounts to the same thing for the War Cycle: a beginning of a war or its escalation are both considered a significant event.

The « Recurrent » War Cycle - Page 32 of 84
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CONTEXT

The War Cycle has had an influence on the Lebanese wars, but it is not possible to make the predictions we do for Europe or the Arab-Israeli conflict because there have not been enough conflicts in the last 15 years from which to extrapolate.

However, the Lebanese context still has an important role in demonstrating the War Cycle. **So far, all Lebanese wars have followed this cycle, which is noteworthy even if we are unable to convert the observation into a forecast for the Lebanese context.**

The dissolution and weakness of a state lead to civil wars. The current dramatic economic situation is a sign of a more serious crisis to come.

CONTEXT

Global (world) context
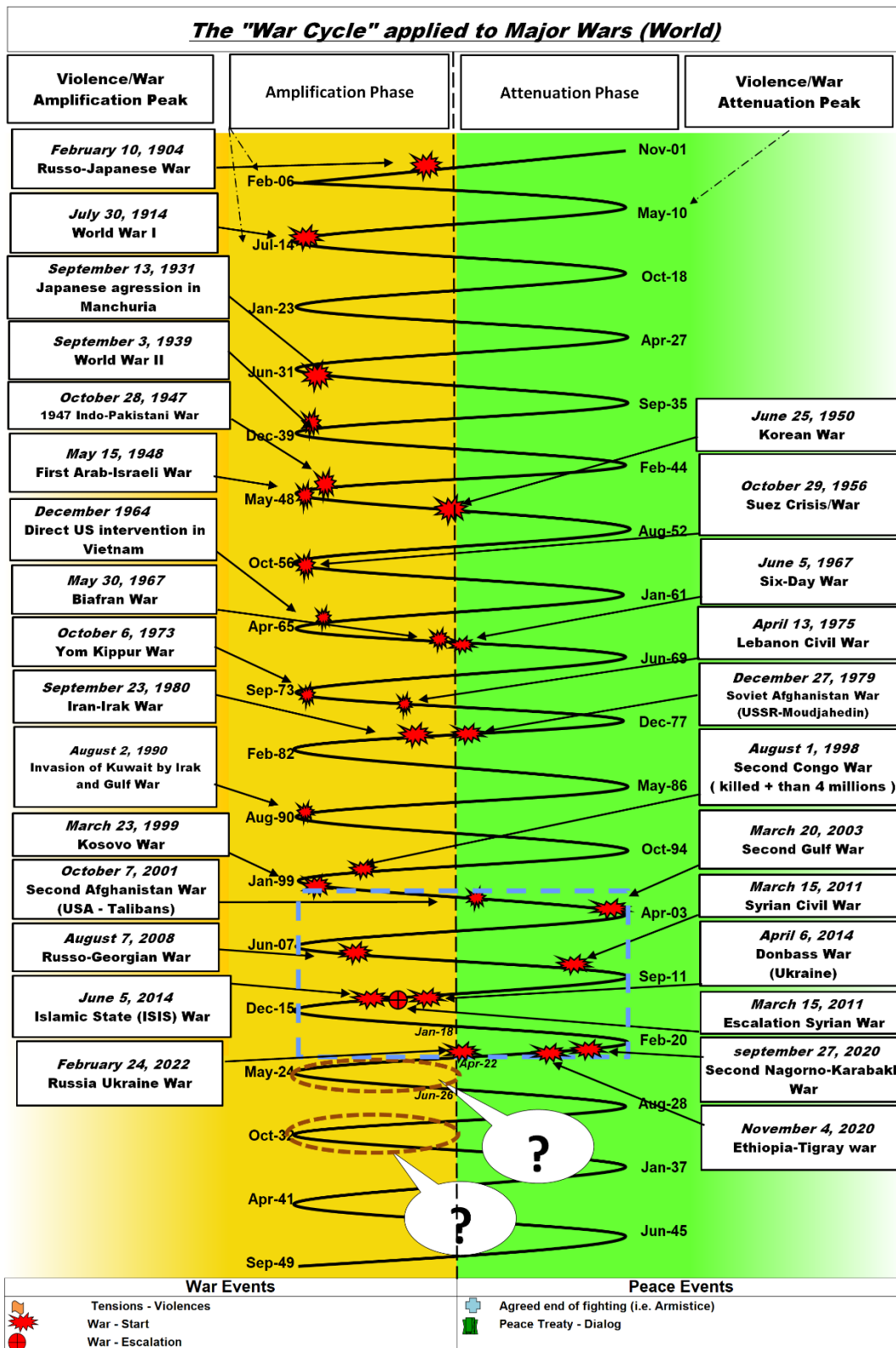
Figure 6 – Global context

Deviation Table for Major Wars (World)

Event	Evt Date	Peak Date	Deviation in months (vs Peak)	Deviation in % (vs Peak)
Russo-Japanese War	10-Feb-04	18-Feb-06	-24,3	-48%
World War I	30-Jul-14	31-Jul-14	0,0	0%
Japanese agression in Manchuria	13-Sep-31	22-Jun-31	2,7	5%
World War II	03-Sep-39	02-Dec-39	-3,0	-6%
1947 Indo-Pakistani War	28-Oct-47	13-May-48	-6,5	-13%
First Arab-Israeli War	15-May-48	13-May-48	0,1	0%
Korean War	25-Jun-50	13-May-48	25,4	50%
Crisis/Suez War	29-Oct-56	23-Oct-56	0,2	0%
Direct US intervention in Vietnam	01-Dec-64	04-Apr-65	-4,1	-8%
Biafran War	30-May-67	04-Apr-65	25,8	51%
Six-Day War	05-Jun-67	04-Apr-65	26,0	51%
Yom Kippur War	06-Oct-73	14-Sep-73	0,7	1%
Lebanon Civil War	13-Apr-75	14-Sep-73	18,9	37%
Soviet Afghanistan War (USSR-Moudjahedin)	27-Dec-79	24-Feb-82	-26,0	-51%
Iran-Irak War	23-Sep-80	24-Feb-82	-17,1	-34%
Invasion of Kuwait by Irak and Gulf War	02-Aug-90	06-Aug-90	-0,1	0%
Second Congo War (killed + than 4 millions)	01-Aug-98	16-Jan-99	-5,5	-11%
Kosovo War	24-Mar-99	16-Jan-99	2,2	4%
Second Afghanistan War (USA - Talibans)	07-Oct-01	16-Jan-99	32,7	65%
Second Gulf War	20-Mar-03	16-Jan-99	50,1	99%
Russo-Georgian War	07-Aug-08	28-Jun-07	13,3	26%
Syrian Civil War	15-Mar-11	28-Jun-07	44,6	88%
Donbass War (Ukraine)	06-Apr-14	08-Dec-15	-20,1	-40%
Escalation/Internationalization War in Syria	05-Jun-14	08-Dec-15	-18,1	-36%
Islamic State (ISIS) War	05-Jun-14	08-Dec-15	-18,1	-36%
Second Nagorno-Karabakh War	27-Sep-20	19-May-24	-43,7	-86%
Ethiopia-Tigray war	04-Nov-20	19-May-24	-42,5	-84%
Russia Ukraine war	24-Feb-22	19-May-24	-26,8	-53%

1900-20xx Average of the absolute deviation values with all events			18	35%
1900-1999 Average of the absolute deviation values with events from 1900 up to 1999			10	21%
2000-20xx Average of the absolute deviation values with events from 2000			31	61%

Table 6 - Global deviation table

CONTEXT

How does this context help to demonstrate the War Cycle?

Over the period 1900-1999, wars are mostly triggered during phases of amplification.

Over the period 2000-2022, wars are mostly started during attenuation phases.

The global context period of 2000-2022 does not immediately help to demonstrate the War Cycle without further analysis.

Global analysis using context

Is the chosen method an impasse?

The blue rectangle in the graph shows that over the period of 2001 to 2021, global wars do not demonstrate the War Cycle since more wars started during the attenuation phases than during the amplification phase.

The strict application of the methodology, using war outbreak dates, leads to an apparent impasse because we have just demonstrated that there are no significant result over a period of almost 20 years.

Analyzing war contexts in terms of war outbreak dates requires one or more additional methods

Several factors actually demand consideration:

- When war becomes permanent, as was the case after the attack of September 11, 2001, it is difficult to see which wars do or do not verify the War Cycle. There are periods, such as the Napoleonic Wars at the beginning of the 19th century, where the phenomenon is not visible by war outbreak dates alone.
- A war may start in the attenuation phase but will likely produce a significant escalation during the amplification phase. The Iraq war that began in 2003 and the Syrian war that began in 2011 began on an attenuation peak, but it has been shown that these two wars did see a clear excess of violence around the amplification peaks, as referred to in **MATERIALIZATION-** (page 40 onward).

The « Recurrent » War Cycle - Page 36 of 84
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- Presenting war outbreak dates with their contexts is useful but does not serve to fully evidence the theory; cases of escalation specific to wars that commenced during attenuation phases must be taken into account.

We can see that war outbreak dates only tell us so much. There are many cases in which those dates do help to demonstrate the War Cycle, but there are others whose escalation during the amplification phase is the significant part, which merits our consideration.

Will there be a nuclear war or a new world war?

The risk is great but not certain. To date, we have no reliable data on the amplitude of the cyclical phenomenon leading to the War Cycle. It is assumed that both world wars correspond to a phase of amplification of huge magnitude. The fact that the Ukraine-Russia war of 2022 started just before the amplification phase can be interpreted in one of two ways:

- The amplification peak shifted (this was the case in 2014 when several wars were declared within weeks of each other)
- The phase is one of amplification of a very significant magnitude, meaning that the worst is yet to come and that the war of 2022 is only the beginning.

How can we decide which interpretation to accept?

If the peak had shifted (from 2024 to 2022), several wars would have started almost simultaneously, but this was not the case. Several wars within the former socialist perimeter were revived in September 2022, but their intensity is too low to confirm a shift of the amplification peak.

So far, the wars that confirm the War Cycle have occurred on both sides of the amplification peaks; a shift in the War Cycle was not necessary. The most likely scenario is that the peak of amplification in the period of 2022-2026 has not yet been reached and that the Ukraine-Russia war may amplify and become internationalized in the period of 2023-2025.

Despite our data showing shifting amplification peaks (the 1965 amplification peak has likely shifted to 1967 and the 2015 peak to 2014), we have no credible data showing magnitude variation other than the scale of the wars during the entire amplification phase.

The intensity of the Ukraine-Russia war from February 2022 is the only worrying indication for the moment. The Second World War, of course, was not a single war but two different and

The « Recurrent » War Cycle - Page 37 of 84
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quite separate conflicts. A complementary Asian war would be sufficient to place us in the same situation.

The « Recurrent » War Cycle - Page 38 of 84
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What can we conclude from the different contexts?

- Contexts contribute directly to confirming the War Cycle theory. *If there is any doubt or dispute, it is important to look carefully at the wars in each context. Are the wars in their contexts meaningful? If you believe there are other wars to take into account, they should be discussed. The Global context is the only one for which wars were selected due to the difficulty of placing all wars of international significance on a single graph.*

- The proportion of wars that verify the War Cycle is statistically significant; there is an unknown phenomenon that amplifies violence and wars and increases the probability of war or escalation during periods of war amplification.

- The War Cycle is not specific to any one region or conflict.

- Globally, the period from October 1, 2001 to 2022 arguably features more wars during the attenuation phases than amplification phases, an observation that argues against the War Cycle; however, this is somewhat similar to the previous problem of statistics taken from a list of wars. ***It should be noted that the post-9/11 period has resulted in a period of permanent war. The effect of the War Cycle remains visible at the outbreak of wars in recurrent conflicts (such as the Arab-Israeli conflict) but the lines are blurred in the global context. When war is permanent, the War Cycle is not very visible at the global level, even if it remains visible and applicable in regional contexts (Europe, Arab-Israeli conflict).***

- For those seeking to challenge the War Cycle theory, there are two major wars whose context and start dates are questionable in terms of demonstrating the War Cycle:
  - the war in Iraq in 2003,
  - the war in Syria in 2011.

Critics of the War Cycle who highlight these two particular wars should examine the section entitled Materialization/Visualization of the War Cycle *with interest.*

The « Recurrent » War Cycle - Page 39 of 84
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MATERIALIZATION- Visualization

By chance, some data was collected that appeared to indicate a beginning of the materialization process of the War Cycle. The chance is known as Wikileaks and to it this study owes the notions of the visualization and materialization of our cyclic phenomenon.

Iraq: the precious data from Wikileaks

The U.S. military has done a remarkable job of internally recording all incidents, deaths and injuries during the war in Iraq that began in 2003.

Between Sunday 24 and Monday 25 October, 2010, following the publication of the U.S. military reports by Wikileaks, the *Le Monde* newspaper published a graph clearly showing a peak in violence in late 2006. Prior to the graph's publication, it was accepted that the peak of violence in Iraq was in 2007, and the figures given were extremely variable depending on the source. Careful analysis of the reports revealed by Wikileaks has made it possible to measure the actual violence in Iraq from 2004 to 2009, a measure of the number of casualties. The source of the original graph published in *Le Monde* is the Bureau of Investigative Journalism. According to the U.S. military reports published by Wikileaks, there were 110,000 deaths between 2004 and 2009. The following graph (reproduced below) shows the distribution of both fatal and non-fatal casualties over time. This is a reliable measure of the violence in Iraq, known to date, during this period and is based on reports, unlike many other estimates based on a few polls extrapolated by statistical methods and whose sources followed very different assumptions.

The « Recurrent » War Cycle - Page 40 of 84
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MATERIALIZATION
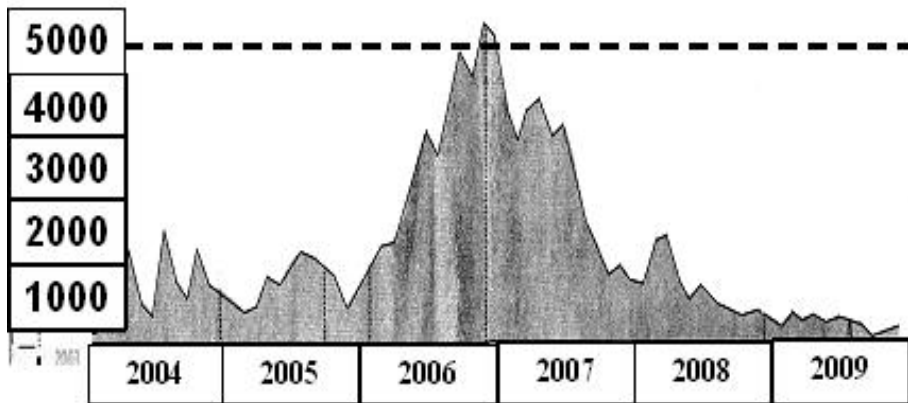
Figure 7 - Wikileaks - Graph from US Army reports

Curve showing the number of dead and wounded (vertical axis) versus time (horizontal axis) based on US military reports obtained by Wikileaks

This curve is based on 400,000 military reports provided by Wikileaks and exploited by the media.

Knowing that the amplification peak was in mid 2007 and the next one in late 2015, someone familiar with the War Cycle is able to place the 2007 and 2015 amplification peaks on this graph.
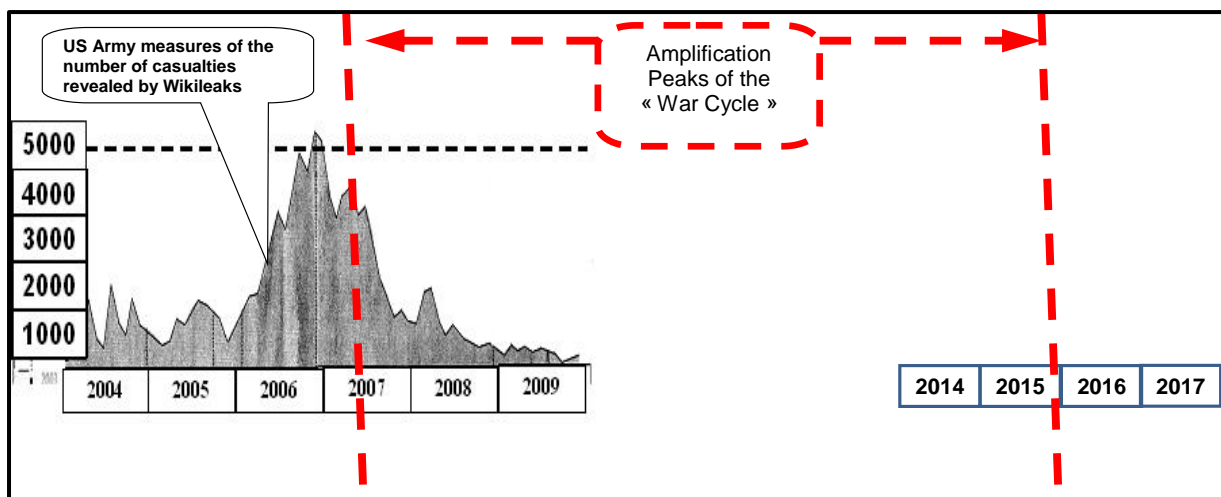
Figure 8 - Wikileaks data + War Cycle peaks

MATERIALIZATION

Has the War Cycle been materialized?

It has not. We see a half-period of the War Cycle and a peak shifted by about 6 months with respect to the theoretical peak of 2007. This is a coincidence that gives the impression of materialization of the amplification peak, but it is insufficient for visualizing the War Cycle. At least one complete cycle (8.5 years) is needed. Two cycles (17 years) would give weight to the subject. This is a good start, but we will need something else to claim to have visualized/materialized the War Cycle.

What would someone familiar with the War Cycle have concluded before 2014?

It could have been concluded that the departure of the Americans from Iraq in 2011 was the most peaceful period. If this is indeed the materialization of the War Cycle, in the amplification phase that follows (2014 to 2017), we will see a component of internal violence/civil war in Iraq pick up until 2015 and then a further decline in that violence/civil war. The Americans left Iraq believing that the job was done. If they had known about this phenomenon, they could have reached these conclusions and anticipated the period that followed. Everything that happened afterwards confirmed this.

Iraq: 2014 and 2015

US Army measures of the number of casualties revealed by Wikileaks

Amplification Peaks of the « War Cycle »

Extension of the Islamic State

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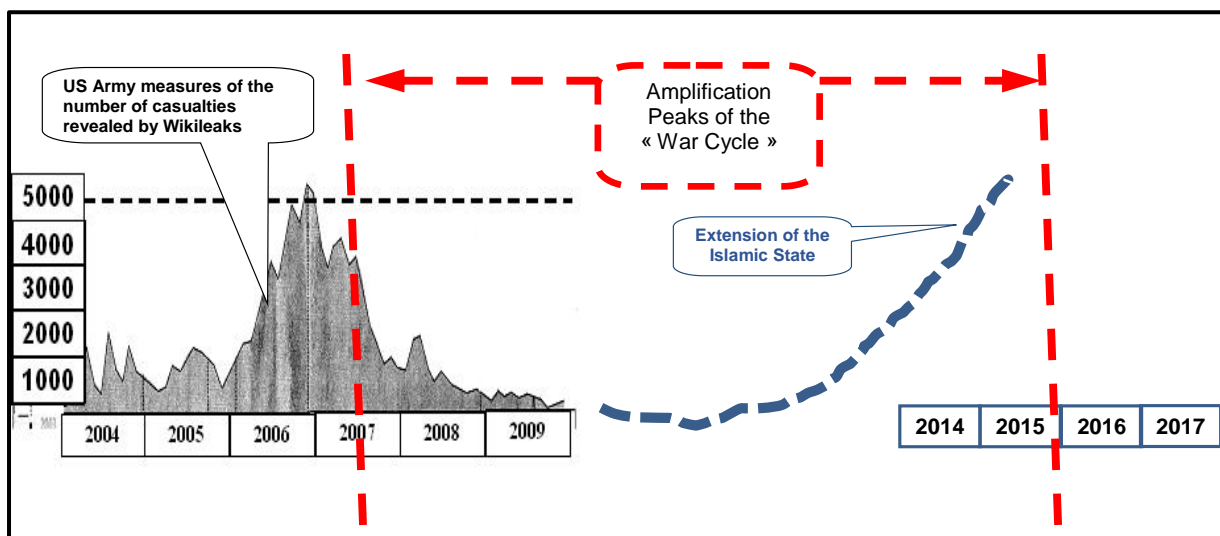
MATERIALIZATION

Figure 9 - Iraq 2014 and 2015

What we see in 2014 and 2015: Since 2012 there has been a rise in violence (dotted line), confirming that the cycle identified by Wikileaks is indeed the materialization of the War Cycle. The media gradually spoke of a resumption of attacks, then, at the end of 2013, of a level of violence similar to that of 2008/2007; then this new war in Iraq against Daech put paid to any tallies**.** Unfortunately, the trends cannot be measured as accurately as with the US military reports. We have the impression that there is such a trend, based on all the incoming information, but are unable to demonstrate it with a factually-based curve.

Iraq: 2016
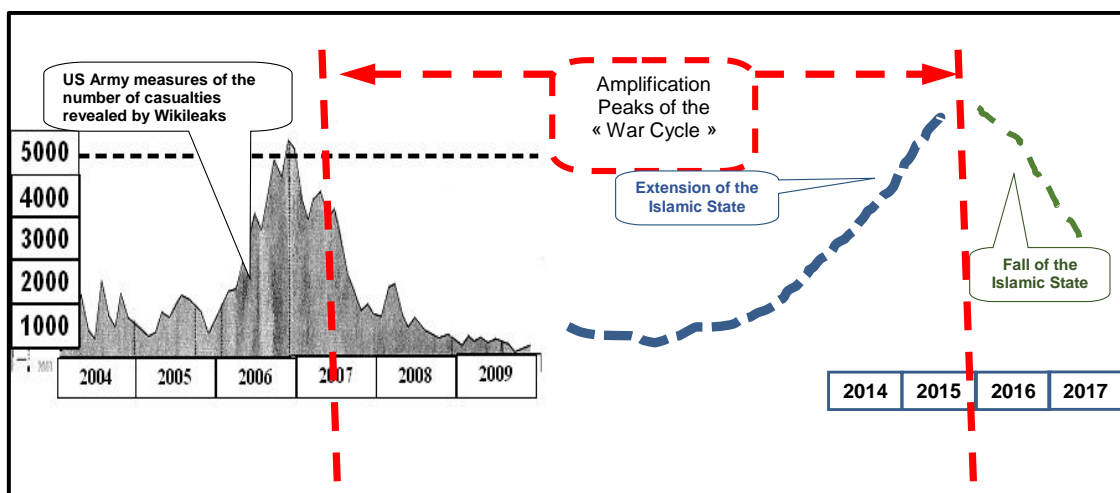
Figure 10 - Iraq 2016

What we see in 2016: The conflict in Iraq is losing its intensity. The Islamic State's retreat is resulting in a gradual recapture of the territories initially conquered in 2014. Their action will likely continue in the forms of standard attacks but with seemingly less intensity. A way to measure or reliably estimate has yet to be found to supplement this information. This is the first time the cycle could be materialized into a graph over a period of more than 10 years. Half of the work is based on hundreds of thousands of US Army reports, but there is a small flaw: since Wikileaks, there are no more data available through the Americans. Although the first part of the curve from 2004 to 2009 is incontestable, the extrapolation from 2014 to 2016 is not demonstrated.

Iraq: Discovery of Iraqbodycount.org

In March 2017, the author discovered the website "Iraqbodycount.org", which provides data on the number of civilian deaths in Iraq. A group of British and American opponents of the 2003 Iraq War have documented and recorded the violent deaths from 2003 to 2022, so that everyone will remember the consequences of this war.

The following graph is taken from the Iraqbodycount.org website (https://www.iraqbodycount.org/database/) dated January 20, 2022; the amplification and attenuation peaks of the War Cycle have been added.
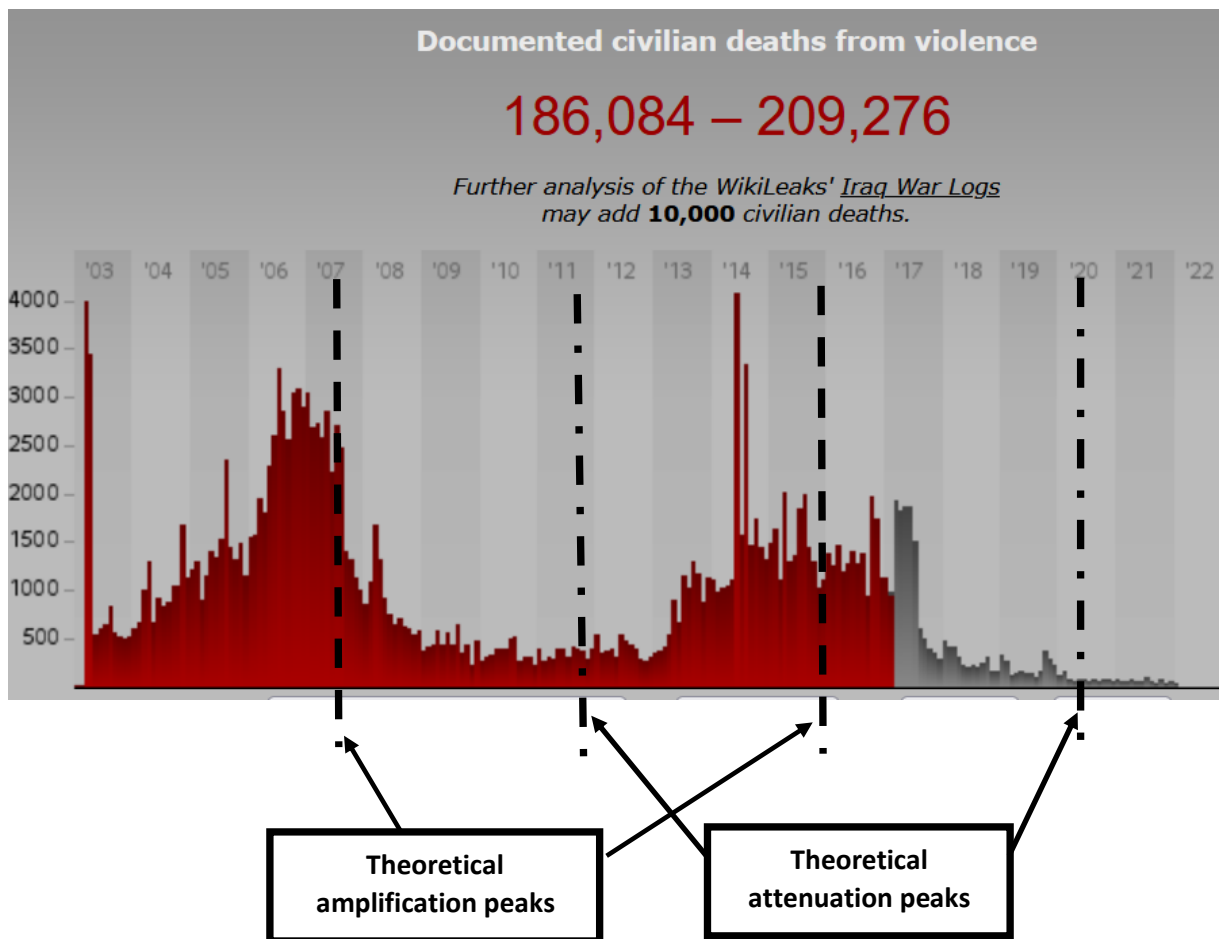
Figure 11 Iraqbodycount.org & War Cycle peaks

Using the data available on the site Iraqbodycount.org, we can verify not only the Wikileaks data but, more importantly, the period of 2012 to 2017, for which no data were available from

The « Recurrent » War Cycle - Page 44 of 84
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MATERIALIZATION

the US military. Materialization/credible visualization: a disturbing coincidence. The data collected by Iraqbodycount.org are the only existing credible data to cover such a long **period (two complete periods of the War Cycle).**

Iraq: What can we conclude about the visualization/materialization of the War Cycle?

The principle of the materialization/visualization of the War Cycle seems credible, first with the data from the US army via Wikileaks then those provided by Iraqbodycount.org.

- Hundreds of thousands of reports have been used to draw these curves
- We have 2 documented sources that converge over the first period (2003-2011) and then a single source over the period 2011-2022
- What is contestable in this visualization of the War Cycle? At this stage, it is a beginning of proof, insofar as other cases will be needed to convince us that this is not a simple coincidence.
- We note a similar time lag (6 months to a year) on the 2 successive peaks of amplification of the data (Iraq). The "observed template" is therefore a few months behind the "theoretical template". This is not surprising, given that the cyclical phenomenon is not a perfect sinusoid, but probably an imperfect sinusoid that shifts a little in either direction at each peak. We would need to know the origin of the phenomenon in order to make the necessary corrections.

  In 2014, there is a sharp spike that seems to correspond to the offset of the peak observed both in the outbreak of wars and on the Syria graph shown on the next page.

Syria: Visualization of a period of the War Cycle

(The following text and table 7 were taken from Wikipedia)

" … The following figures were all compiled by the SOHR, which is considered an authoritative source on the subject. The figures are for documented deaths only, while SOHR estimates that another 100,000 undocumented deaths occurred in addition. The data include not only civilian but also all combatants on both sides…"

Deaths in Syria (source : SOHR)			
Time period	**Pro-government forces**	**Anti-government forces**	**Civilians**	**Grand total (inc. unidentified)**
2011	3 138	619	3 968	7 841
2012	18 928	9 746	19 924	49 361
2013	30 269	18 914	22 806	73 929
2014	25 106	32 803	18 038	76 268
2015	17 668	23 601	13 021	54 574
2016	14 771	23 431	141	52 589
2017	10 771	14 064	13 369	347
2018	4 522	8 663	6 776	2 013
2019	2 968	4 727	3 488	11 244
2020	2 585	2 693	1 528	6 817
2021	1 069	1 238	1 558	3 882
Total	*131 795*	*140 499*	*118 576*	*391 335*

Table 7 - Number of deaths in Syria by category (SOHR)

[Deaths during the Syrian War (SOHR)]

[Deaths per year]

MATERIALIZATION
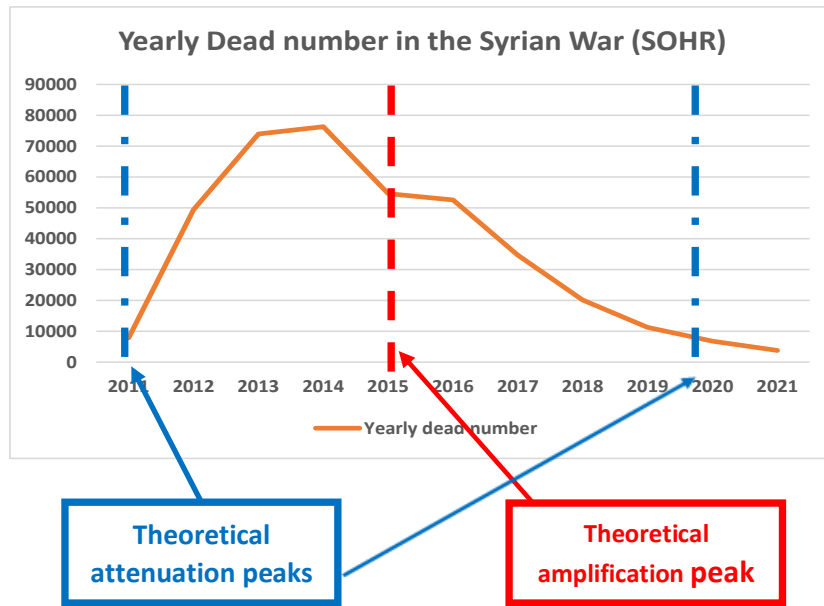
Figure 12 - Graph of yearly number of deaths in Syria

Because the war was longer in Iraq, the data only cover one period of the War Cycle, but some data are similar:

- The attenuation peaks correlate with the period with the fewest deaths
- There is a lag between the Theoretical Amplification Peak and the Actual Amplification Peak, which is more in 2014. **_This lag was seen for all the wars that broke out in 2014. The first half of 2014 saw an Israeli-Palestinian war, the war in Ukraine, the war against the Islamic State_**.

What do the Iraq & Syria data tell us about the demonstration of the War Cycle?

The data available on the Syrian war are a little less precise but they do confirm the findings on the Iraq war that started in 2003. This is very important because relying solely on war outbreak dates would indicate that these two wars (Iraq and Syria) broke out near an attenuation peak. Showing that amplification phases have an effect on the course of the war is very difficult by *context* alone. But using curves based on tens or hundreds of thousands of reports brings up these curious coincidences, as if the War Cycle had an effect on the course of the war and its victims. We can imagine that only the leaders of war are aware of this phenomenon if we look

solely at war outbreak dates, but curves like this show that all implicated combatants and armed forces are affected.

Are there other examples?

The two world wars should probably have similar curves, and there are certainly data somewhere that we could use to find out.

More examples will have to be found. This is a research project in its own right.

However, the likely limitations of this exercise must be considered:

- It is certain that we cannot visualize this phenomenon for all wars, especially if they are too short and insufficiently intense.
- It does not appear that the accumulation of all the dead and wounded over all the wars is significant, based on the examples of data available on such a subject.
- The war in Ukraine that broke out in 2014 is not significant in terms of deaths and injuries. ***However, data collected by the OSCE[5] through the SMM[6] on the number of violations and explosions show that the quietest period (in terms of quantity of violations and explosions) from 2014 to late 2021 is the period after the ceasefire of July 2020. The quietest period of the ceasefire in Ukraine tallies with the year of the attenuation peak.*** *This shows that the measurements from one war to another are not necessarily the same, in order to come to meaningful interpretations.*
- From these two materialization curves, we have a good reason to be worried about the 2022 Russia-Ukraine war. It should worsen in 2023 and maybe 2024.

[5] OSCE: Organization for Security and Cooperation in Europe
[6] SMM : Special Monitoring Mission to Ukraine
The « Recurrent » War Cycle - Page 48 of 84
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Conclusion – the Materialization/Visualization of the War Cycle

The case of the war in Iraq has made it possible to materialize what looks like the effect of the War Cycle by using the data from the US army via Wikileaks. This materialization was confirmed by Iraqbodycount.org, which showed the effect on two successive periods, two amplification phases and two attenuation phases. To date, we have no other data to measure the effect over such a long period and in the same country.

The case of the war in Syria confirms some of these elements from the SOHR data.

This is a beginning of proof that requires confirmation with other cases, starting with the two world wars.

The « Recurrent » War Cycle - Page 49 of 84
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Modeling the effect of the War Cycle

Let us review what we have discussed so far:

> ➢ Statistics of all the wars of the 20th century from a verified list of wars does not provide convincing evidence that is reproducible by any researcher of the reality of the War Cycle.
>
> ➢ Selected contexts in recurrent conflicts and in different geographical areas provide evidence for the existence of a disturbing cyclical phenomenon on the basis of the dates of the outbreak of wars.
>
> ➢ Two cases of wars that call into question the existence of a War Cycle in the context of their context serve to prop up the idea of the existence of a cyclic phenomenon in the materialization of the War Cycle through the points on a graph, as if a war initiated at the most unlikely moment during a phase of attenuation caused a measurable escalation during the next phase of amplification, thereby confirming an amplification effect.

We have elements that may seem contradictory. Can we form them into a coherent explanation?

To understand how the cyclic phenomenon works, we must keep two other phenomena in mind:

Phenomenon A - a cyclical phenomenon that amplifies or attenuates tensions
Phenomenon B - the outbreak of war

And finally, the combination of these two phenomena.

Phenomenon A - a sinusoidal phenomenon that amplifies or attenuates tensions

There are times when violence is amplified and times when it is attenuated. The transition from one to the other is gradual.
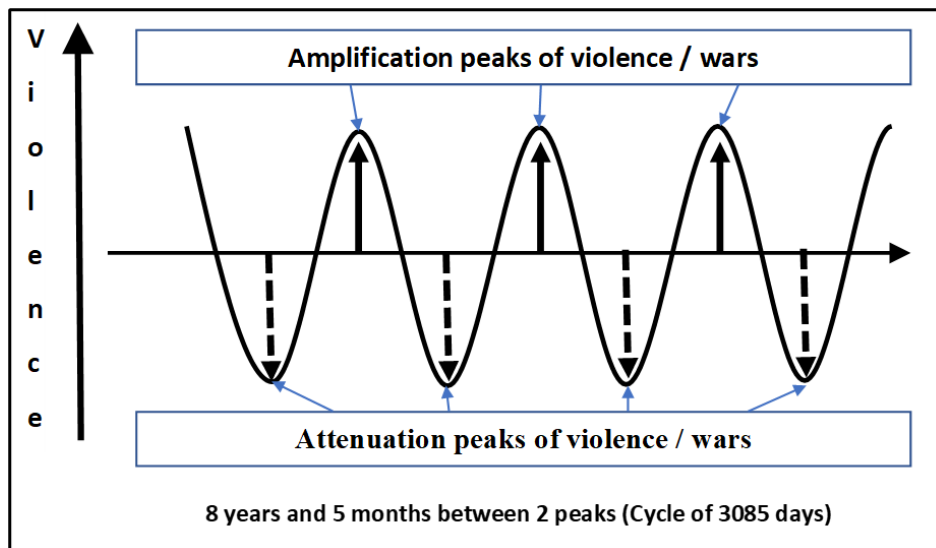
Figure 13 - Amplification and attenuation peaks

The « Recurrent » War Cycle - Page 51 of 84
*This is the reference V2 of the current research - Authorization to copy for research assessment
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Phenomenon B - The outbreak of war

A war is caused by a combination of causes rather than one single cause.

Polemology (in the journals of the Institute of Polemology[7] in the 1970s) distinguished three main levels of causes:

- The structural cause, which relates to permanent causes (religious, cultural, institutional differences)
- The conjunctural cause, which relates to the succession of events that precede a war without being the immediate cause
- The immediate cause, which is the event that triggered the war.

The causes accumulate and can surpass the **war outbreak threshold[8].**

A war will only be triggered if the accumulation of causes exceeds a threshold called the *war outbreak threshold*, a notion considered fundamental here. Beyond this threshold, outbreak of war occurs. The accumulation of tensions leads to an incident or action that will mark the beginning of the war.

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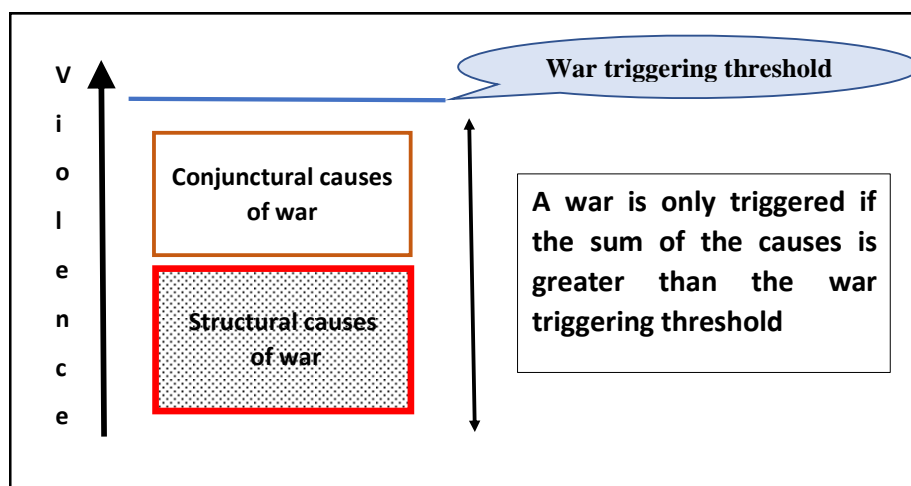
[7] At that time, the Institute of Polemology was located in the *Musée de la Guerre* in Paris.

[8] If the different causes of war (structural, conjunctural, immediate) are derived from polemology, the notion of a war outbreak threshold is specific to the author. There may be other authors who have described the equivalent of a threshold, but they have not been identified to date. If they are ever identified, they will be referenced.

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Figure 14 - War outbreak threshold

Combination of phenomena A and B on an amplification peak

Case 1: The accumulation of causes is slightly below the war outbreak threshold

In this case, the cyclical phenomenon during an amplification phase acts as an additional cause whereby the war outbreak threshold is passed and the permanent tension becomes war.

This explains *why* war contexts (from page 18*)* have been included in this analysis and *how* they inform our predictions.

By looking at recurrent conflicts (e.g. the Arab-Israeli conflict), which appear on the brink of war without entering into it, we can predict the probable wars in the next amplification phases.
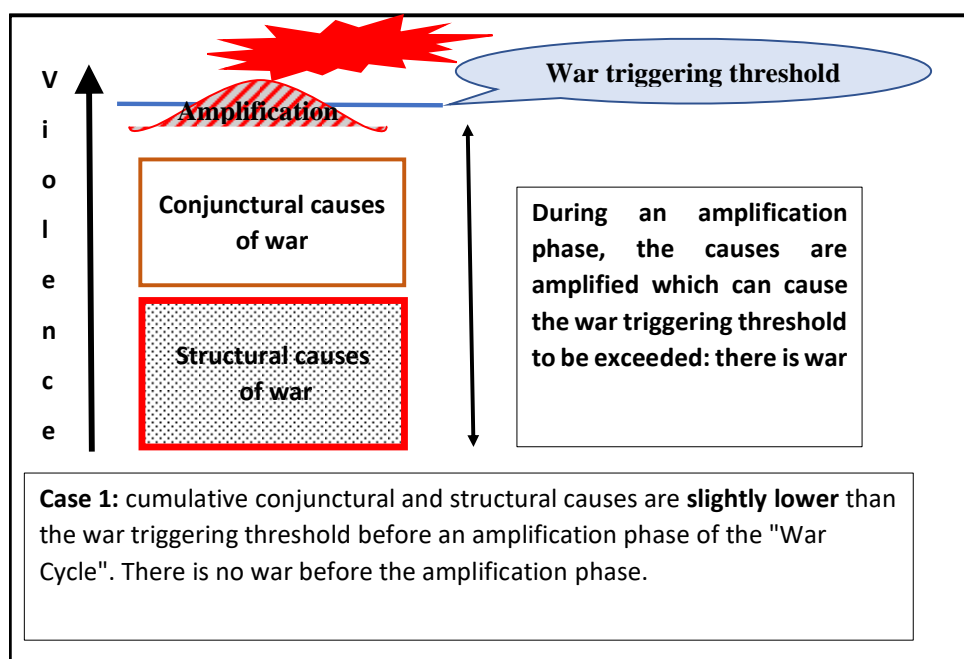
Figure 15 - Modeling case 1

Case 2: The combination of cyclical and structural causes is much lower than the war outbreak threshold

In this case, the cyclical phenomenon, during a phase of amplification, acts as an additional cause, but there is no war because the threshold for the outbreak of war is not reached.

This also allows us to imagine means of action, i.e. to act on the identified causes to avoid crossing the war outbreak threshold. If we do not know the origin of the cyclic phenomenon, we cannot act on this cause. Only known causes can be mitigated. Standard, vigorous negotiations should reduce tensions and the causes of war. If they are conducted before the next amplification phase, there is hope that war considered probable can be avoided since, even when amplification is caused by the "cyclical phenomenon," the war outbreak threshold will not be reached.
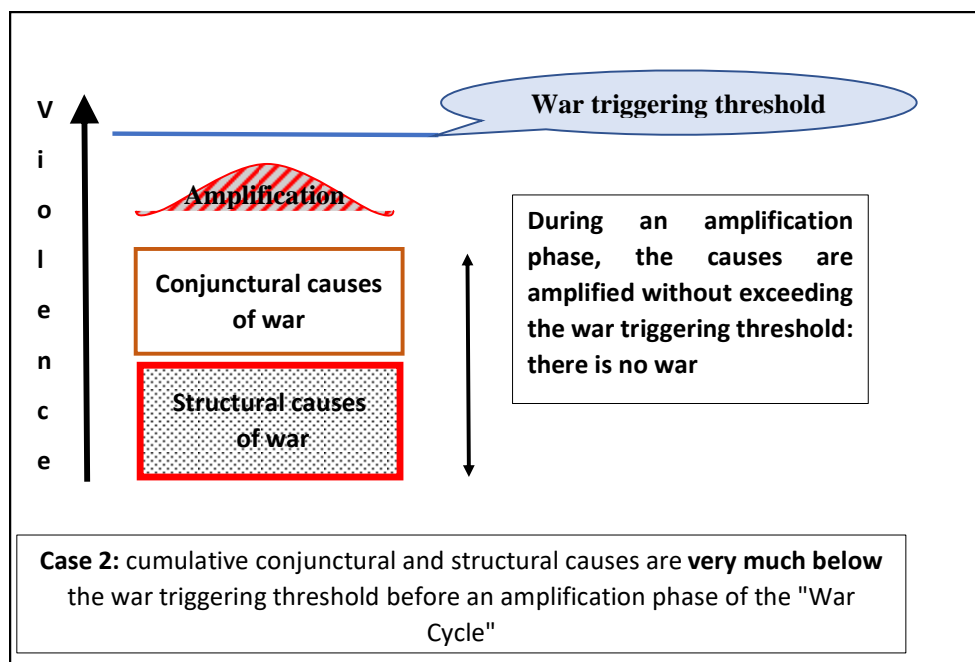
Figure 16 - Modeling case 2

Case 3: the accumulation of causes is well above the war outbreak threshold, even before the amplification phase

In this case, a war has already broken out before the amplification phase so there is no new war. The period of amplification can encourage visible "over-violence" through (local, regional or international) military escalation or new violence. There are several examples of this:

- In early 1964, the bombings in Vietnam marked a military escalation in the amplification phase. The war had officially been going on for some time, but the real escalation occurred during this amplification phase.
- The war in Iraq began in 2003, at the time of an attenuation peak; the American victory was followed by an Iraqi civil war that correlates with the phase of amplification. See *MATERIALIZATION-* (page 40 onwards). The internal Iraqi violence increased until the amplification peak and then steadily decreased, until a gradually resumption with the next amplification phase and the war against the Islamic State.
- The war in Syria began in 2011 during a phase of attenuation; it underwent an escalation and internationalization that began in 2014, during the amplification phase, and continued in 2015 and 2016 before the Islamic State's pushback began. The conflict escalation between 2014 and 2016 correlates with an amplification phase of the War Cycle.

The « Recurrent » War Cycle - Page 55 of 84
*This is the reference V2 of the current research - Authorization to copy for research assessment
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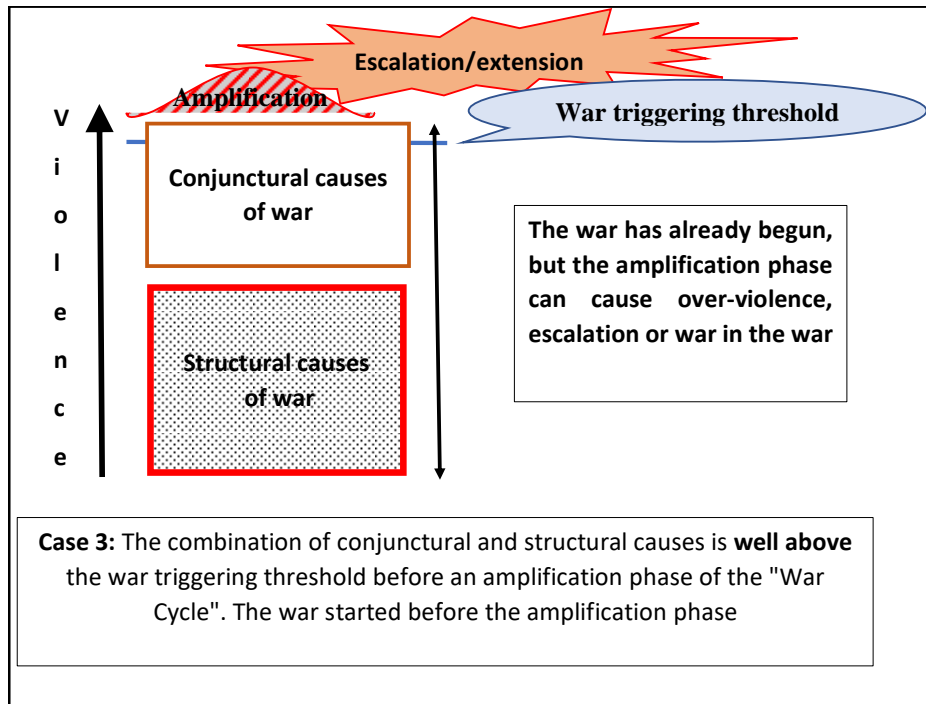
MODELING

Figure 17 - Modeling case 3

This explanation is consistent with results that seemed contradictory. We can speak of modeling the effect of the War Cycle.

The « Recurrent » War Cycle - Page 56 of 84
This is the reference V2 of the current research - Authorization to copy for research assessment
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Forecasting the risk of war

Logic dictates that when a cycle is identified, it is possible to predict war risks based on the knowledge of the identified cycle. Making predictions that are then confirmed can therefore be part of an indirect demonstration of the identified War Cycle.

In 2022, the War Cycle controversy could be summed up in a simple statement: ***some people claim that the War Cycle presented is false and far-fetched, but unluckily for them, the false theory gives some accurate results. What would you prefer: an exact theory that gives no results or false results or a false theory that gives exact results?*** So, we will apply a false theory that has given exact results several times. This is pragmatic, even if the academics should be outraged.

What did we learn that we could use for forecasting?

- Rule A1: The contexts show that in recurrent conflicts, there is a probability of war during the amplification phase. Since the duration of an amplification phase is slightly more than four years, we can say that there is a high probability during the two years surrounding the amplification peak and a slightly lower probability during the other two years.
- Rule A2: Understanding how this cyclical phenomenon works and the materialization of the War Cycle makes it possible to understand that when a war has begun before the amplification phase, there can be an escalation (or a new war within a war).
- Rule A3: If a new conflict emerges during the amplification phase, it may turn into a new war, even if it does not correlate with a recurring, previously identified conflict.

Forecasts made for the period 2005-2009 using the War Cycle

At that time, we were focusing on the Israeli-Arab, European and Global, contexts. We were able to predict:

- A war in the Arab-Israeli conflict, of which there have been two
- A war in Europe, specifically the war in Georgia.

Forecasting Wars

This was the first application of the War Cycle in forecasting. The results were good but not persuasive before the wars of the period, or even after the wars, as if the difficulty of the subject led to a denial of its reality.

Forecasts made in 2012 for the period 2014-2017 using the War Cycle

There will probably be new wars within the existing recurrent conflicts (see graphs):

- One (or more) new round(s) of the Arab-Israeli war (as per rule A1).
- A new European war (according to rule A1).
- An episode of Indo-Pakistani tension (following rule A1).
- A war of international scope.

As well as other new wars:

- One or more wars other than the previous ones (according to rule A3).

And the probable expansion of existing wars

- Syria is expected to turn into a regional and/or international war if not resolved by 2012 (as per rule A2).

Result of forecasts made in 2012

The period of amplification was indeed very marked. A lot of it was in 2014, slightly ahead of schedule, but there were also some marked events in 2015 and 2016.

This gives the impression that the peak expected in late 2015 shifted to 2014.

New wars in existing recurrent conflicts (see graphs):

In the following text, predictions are denoted by the standard font and actual events by _**bold and underlined italics.**_

- A new round (or rounds) of Arab-Israeli war
  **Gaza war in July and August 2014**

Forecasting Wars

- A new European war

  __Crimean crisis in March 2014 followed by the war in Donbass in Ukraine in April 2014__

- An episode of Indo-Pakistani tension

  __from September 2016__

- A war of international scope

  __war against the Islamic State__

Other new wars:

- One or more wars other than the previous ones

  __Revival of the conflict between Turkey and the PKK from July 2015, war in Yemen since 2014__

Expansion of existing wars

- Syria is expected to turn into a regional or/and international war if not resolved in 2012

  __Iraq-Syria-Turkey-Hezbollah regional war, Russian intervention from September 2015, Western coalition against Islamic State from August 2014__

Forecasting Wars

Forecasts in 2022 for the period 2022-2026 using the War Cycle

There will probably be new wars within existing recurrent conflicts (see graphs):

- A new round of the Arab-Israeli war (as per rule A1) or an Iranian-Israeli variant (see *The context of the Arab-Israeli* conflict, page 19).

- A new European war (following rule A1) (see *European Context* European context (from the Atlantic to the Urals) page 23). ***This war has already begun in the form of the Russia-Ukraine conflict, and there will probably be others. The violence of this war at the end of the attenuation phase is a very bad sign***.

- An episode of Indo-Pakistani (according to rule A1) or India-China tension.

- The A2 rule could apply to the war in Ethiopia that began during the attenuation phase and could escalate regionally if not resolved by 2023.

As well as other new wars:

- One or more wars other than the previous ones (according to rule A3)

- Chinese nationalism could give rise to tensions but not necessarily a new war. Is a US-China arms race possible?
  In August 2022, following Nancy Pelosi's visit to Taiwan, this episode of tension began. It has only just begun and will become a recurrent polarization between the USA and China.

And the possible expansion of existing wars:

- Ukraine, Yemen are candidates for further escalation.

(This is already the case for Ukraine)

What do the results show?

Summary of the different significant results

All results here relate to the Recurrent War Cycle using war data since 1900. The study does not claim that this cycle is the only one; it cannot extrapolate these results to all previous centuries.

The results are:

- The contexts that are the first convincing expression of the reality of the Recurrent War Cycle. The European and Israeli-Arab contexts are the most significant, but there are others.

- The materialization of the War Cycle based on the number of war victims presents another view. The cases of the wars in Syria (2011) and Iraq (2003) show that a war that starts during an attenuation phase can lead to an escalation and an increase in violence during the amplification phase that follows. In other words, there are other events to consider besides the outbreak.

- Modeling = general explanation of the observed phenomenon, giving consistency to what appears contradictory (the notions of *context* and *materialization* here are not consistent without modeling). This modeling incorporates both war outbreaks during amplification phases and war escalations triggered during an attenuation phase.

- War risk forecasts, where the reality shows that the cyclical phenomenon can be used to identify future trends. Confirmed war predictions equates to the confirmation of the existence of the Recurrent War Cycle.

Research so far simply claims to open up this subject, providing results that are convincing enough to warrant further exploration.

There are varying results from different methods.

Modeling gives a global and consistent view and can be used as an entry point to understanding the War Cycle. It aids understanding and the suggestion of possible scenarios.

There are two possible scenarios indicated in the modeling:

The « Recurrent » War Cycle - Page 61 of 84
*This is the reference V2 of the current research - Authorization to copy for research assessment
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- **The one in which permanent tensions are slightly below the war outbreak threshold and during the amplification phase, which can trigger a war.**
  → These cases are demonstrable by their contexts
- **The scenario in which the war started during an attenuation phase and the amplification phase causes an escalation/expansion.**
  → A few scenarios have been demonstrated by the materialization of the cycle.

The **contexts** and the **materialization of the War Cycle** both go some way towards demonstrating the cycle in different cases and shedding some light on the observed phenomenon.

When the war becomes permanent and widespread, as was the case after the attacks of September 2001, a global context is not significant, but the recurrent conflicts (Arab-Israeli conflict, wars in Europe) remain relevant.

War predictions are possible but general. The act of making predictions supports the notion of the War Cycle but some geopolitical knowledge is required when doing so. The contribution of the War Cycle is simply that it enables us to indicate probable periods of wars in certain environments and contexts.

Any incipient evidence must be made available in its unadulterated state if research in this field is to continue.

What is the impact of the War Cycle?

The War Cycle must be considered as an additional cause to those already present. Between 20% and 30% of the causes of war is an initial, imprecise estimate. This phenomenon should be known by all leaders and all those interested in wars, even if the results and consequences are not unanimous in 2022.

The phenomenon will never trigger a war where there are no pre-existing causes. It is similar to the notion of a drop of water that causes a vase to overflow, but has no effect if the vase is empty.

The causes of the War Cycle are completely invisible. Only those who know about the War Cycle can imagine its impact.

The « Recurrent » War Cycle - Page 62 of 84
This is the reference V2 of the current research - Authorization to copy for research assessment
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The Ukraine-Russia war - the most serious crisis since the Second World War – began in 2022, the year in which the risk of nuclear war became continuous until the time the conflict is resolved. As 2022 is only the beginning of the amplification phase, the worst is to come. The Ukraine-Russia war is still in its infancy and will experience jolts that are unpredictable today. If no one considers the aftermath of the war and attempts a negotiation, the war will last at least four more years.

The idea that the war has grown to such an extent because of this cyclical phenomenon is plausible, and hardly anyone knows of it at the time of writing.

It is already difficult, if not impossible, to end wars when the causes are known; adding unknown causes to the equation will only be more difficult for those unaware of them.

It is unlikely that any leader would be willing to admit to fighting a war because such a phenomenon exists. Would they be willing to at least initiate the necessary further research? The answer would probably depend on the public opinion of the person in question. Once the war is underway, the military option is the only one that motivates the parties, at least as long as they are convinced that they will win the war. The War Cycle will be seen as a disruptive force in the ongoing war.

If we could understand the physical cause of this phenomenon, it could help us understand its effect on wars. It is not impossible for world wars to be explained by this phenomenon, even if we do not have, to date, any formal way of demonstrating that it has a greater influence at certain times. If we knew the cause of the cyclical phenomenon, we might be able to assess the intensity of the conflict and whether it is likely to turn into a major international or global war.

Is there a demonstrable effect on peace?

The influence on wars seems to be demonstrable, when supported with arguments and figures, whereas the influence on peace seems difficult to demonstrate, even if we note a tendency toward calm or peace. In order to understand this, we must look at war contexts such as the Arab-Israeli conflict and wars in Europe.

But why this difference between war and peace?

The « Recurrent » War Cycle - Page 63 of 84
This is the reference V2 of the current research - Authorization to copy for research assessment
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Reflections on the results, questions, conclusion

When a war breaks out, it is presented as a compelling necessity that **immediately** triggers a war. The outbreak of a war is not generally disputed and there have been enough wars to provide us with statistical evidence of this.

When peace finally prevails, it is most often a very long process that leads to an official peace, which may never be implemented and never become a reality. Although there is sometimes an easing of a situation that may help to bring about peace, there is no immediate and compelling event like the outbreak of war. It can take weeks, months or years for the will for peace to materialize, and so it is difficult to apply peace-related dates when attempting to statistically confirm a cyclical peace phenomenon.

Moreover, there are very few peace events in proportion to war events to draw statistical conclusions.

Therefore, the results here are limited to wars in the context of their outbreak and escalation, and to war victims as the materialization of the cycle. When there is a tendency toward peace or appeasement, it is indicated but not demonstrated.

Questions and avenues of research

As it stands, this study only opens the door to a vast array of complementary research. Some possibilities are indicated here.

One or more War Cycles?

This study was limited to a single cycle (approximately 8 years and 5 months) since 1900. Because the author's initial intention was the ability to make predictions, the short cycle is sufficient.

However, there may be other cycles:

- Multiples of the Recurrent War Cycle (2 times = about 17 years; 3 times = about 25 years; 6 times = about 50 years, and perhaps other multiples)
- The solar activity cycle of about 11 years could have an influence, although we cannot truly refer to a War Cycle. A pre-study from 2011-2012 shows that periods of intense solar activity seem to have an influence by shifting or reinforcing the peaks of amplification of wars. The pre-study will have to be completely redone and is not published here.

The most advanced statistical study is that of Edward R. Dewey: "Systematic Reconnaissance of Cycles in War" published in the magazine *Cycles* in January 1967. It covers the period 1700-1913. This research of cycles was done on battles and not wars. The main cycles identified are in years: 125.882, 53.50, 23.778, 17.398 and 11.204

There is no cycle around 8.4 years in the report published at the time. However, if we look at the details of the graph table and result (see Appendix B: Elements of Edward R. Dewey's statistical study "Systematic Reconnaissance of Cycles in War") there are 5 cycles close together between 8.076 and 8.771. They were addressed individually and are not presented in the published report as related data. If the statistical method groups all the values between 8.076 and 8.771, considering all those cycles as a single, slightly varying cycle, it would give a value of about 8.4 years, which would be higher in amplitude than all the others. We could then study the case of the values 53.50, 23.778 and 17.398, which perhaps would be a multiple of an approximate value of 8.4, which would then be consistent. Focusing the research on battles

The « Recurrent » War Cycle - Page 65 of 84
*This is the reference V2 of the current research - Authorization to copy for research assessment
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rather than wars probably introduced a distortion to the data, particularly the short cycles. In the same way that we could bring out the 8.4 cycle, we could bring out a 5.7 cycle which, multiplied by 2, is close to 11.2. But does the 5.7 cycle distort the inclusion of battles and not wars into account? To understand the problem with the values around 8.4 (and 5.7), see Appendix B, which includes the table of peaks and their values from Dewey's study. This table should be sufficient for a statistician to understand the hypothesis of reworking and reinterpreting the study data. The hypothesis cannot be confirmed without an equivalent study, but **it is reasonable to think that there is a peak of 8.4 in Dewey's study, according to his own figures published in the article. Thus, the Recurrent War Cycle is probably consistent with the Dewey study (although this would require expert statistical confirmation).**

- The attempt to ascertain a cycle should be repeated for all wars so far by grouping all cycles that are close together into one slightly varying cycle. If the seeking out of a cycle were done in this way, it could provide a compelling statistical demonstration, but based only on the dates of the outbreak of war.

- Dewey has published a dozen studies on cycles of war and has endeavored to identify all possible cycles in all fields. The Cycles Research Institute continues to identify and index cycles. It is more concerned with cycles that can be used in the stock market than patterns such as the war cycle, which is not particularly useful in economic and stock market-related contexts.

Dewey's study seems to have inspired many people in the United States. A Google search of "War Cycle" offers different cycles of the 1967 study, with no citation of Dewey. Is this cultural evidence or a failure to reference a source? In either case, different authors cite several cycles that seem to have come from Dewey's work but do not make attempt to link the different cycles as possible multiples of the same basic cycle.

Repeating the **"Systematic Reconnaissance of Cycles in War"** *study published in* **Cycles** *magazine in January 1967 by including wars rather than battles will be an important step. It is a significant task as it would require the recreation of a database of all wars since 1700, even several centuries earlier. Given the distortion observed by using lists of wars, the work*

The « Recurrent » War Cycle - Page 66 of 84
This is the reference V2 of the current research - Authorization to copy for research assessment
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must be done by historians with a review of the results obtained to ensure the relevance of the wars that are used for the statistical analysis.

Is the Recurrent War Cycle true for all centuries?

This question is often asked in order to minimize or reject the current results. The author has presented information as far back as 1900 in the hope of convincing of the need for additional research over several centuries to answer this question, and does not claim at this stage to provide a definitive answer thereto.

For forecasting purposes, using the relatively near past (about 1 century) is sufficient.

The phenomenon of recurrence, at the heart of the War Cycle, is true in previous centuries, for example the 25-year recurrence of the 1789 French revolution was 1814 which, with the battle of Waterloo, called into question the entire French revolutionary period and restored the monarchy. It is typical for the recurrence phenomenon to involve a recurrence that challenges and potentially ends the period that followed the original event.

For the Recurrent War Cycle, it is most likely that it will shift in time. Its absolute anchorage, with a T0 on the outbreak of the First World War, could change or vary with time, while keeping the same periodicity.

To establish the most accurate average periodicity, a study covering several centuries will be required, but this will have little or no impact on the predictions that can be made for the coming years.

What is the origin of the phenomenon visible through the War Cycle?

For the moment, we do not know. There is no known periodic phenomenon whose periodicity comes close. Multi-pronged, multidisciplinary, international research is needed. Perhaps consideration of cosmic rays and gravitational variations…

The less we know, the more potential avenues we should contemplate.

Some hypothesize that there is no physical phenomenon at the origin of this effect but that it is inherent to our structures of thought and collective behavior. This is viable, but not enough to put forward a hypothesis in order to realize a truth.

To date, this author has no credible proposition about the origin of the cyclical phenomenon.

What upheaval could this cause to the political and human sciences?

If the Recurrent War Cycle is recognized one day as an inescapable truth, some intellectual and academic upheaval will ensure. The Recurrent War Cycle is only one application of a more general theory called Recurrence Theory, which has several applications and concepts. There is no attempt, at this time, to demonstrate the statistical reality of the Recurrence Theory. Although this theory is used as a basic research tool to create research leads and concepts, its objective demonstration would be an enormous undertaking. If the Recurrent War Cycle is sufficiently recognized, there will still be time to explain all these new concepts. There may be an upheaval, but it will not happen overnight. It is better to consider the concepts at the origin of the Recurrent War Cycle as an embryo of philosophy, awaiting further development. Only the area of the Recurrent War Cycle is mature enough for rational and argued discussions that, given the fact they have been commenced, should at least be concluded.

The current conclusion is that the information presented is disruptive and must lead to more profound study so that a shared conclusion can be reached by the researchers in the field. Whatever doubts surround that final conclusion in the years to come, everyone should be aware of the stakes of the cyclical phenomenon.

The short-term difficulty, with regard to the Russia-Ukraine war, is knowing what part of the war is directly due to the cyclical phenomenon. This point has been not developed here, but several concepts from the Recurrence Theory, including the War Cycle, contribute to the amplification of the Russian political turmoil that led to the war and the somewhat "barbaric" escalations by a country claiming to be civilized and a leader of a new order; an order that has become the right to invade, annex, plunder and kill.

The short-term difficulty of making this theory known – which is due to the fact that the author worked alone and the researchers contacted about working on the theory declined to do so before any official publication – resulted in the stifling of further research necessary to try to

understand whether this cyclical phenomenon is strong enough to lead to a form of world war, a somewhat horrifying prospect. It is not too late, but it is clear that the expression "scientific community" indicates something of a fictive notion whereby each researcher seeks to promote his or her own work with no interest shown in an issue that should call on everyone to attempt to understand the influence of this phenomenon on the ongoing war.

Conclusion

The results gathered for the War Cycle are the beginnings of evidence of a strange and disturbing phenomenon. It has probably been a partial cause of several major wars, including the two world wars and the Ukraine-Russia war, which may turn into a nuclear war and/or world war. Because of this, the international community should be aware of it so that further research can be carried out into the understanding of a phenomenon that could threaten the future of the earth itself.

The results should be considered as an initial, temporary inventory, an opening of a subject that warrants further elaboration. Consensus can only be reached if researchers other than the author conduct complementary investigations to confirm or expand areas and elements other than those presented here.

Seeing the excessiveness of the Ukraine-Russia war, it is arguable that awareness of the Recurrent War Cycle could have gone some way to moderating the actors of this war.

Below is a comment from a reviewer of an earlier version of this document in March 2022: "Reading this text helps to explain and understand, in part, the current events in Ukraine. Better knowledge, by more people/leaders might have helped avoid this war by promoting negotiations and not conflict."

Between 2022 and 2026, the war may give rise to developments that appear unpredictable today. Although the War Cycle might be indicative of the major trends and was able to predict a European war taking place over the period 2022-2026, it does not allow us to predict the development of operations on the ground, which depends on the balance of military power. It is not too late for everyone to become aware that some wars escape us and are perhaps the

Reflections on the results, questions and conclusion

partial result of a cyclical phenomenon that goes beyond us and leads us by the nose. Should we ignore it or should we have the courage to explain it and to continue this preliminary research?

October 23, 2022

The « Recurrent » War Cycle - Page 70 of 84
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Renowned authors who have discussed the periodicity of wars

The subject of the periodicity of wars is recurrent in the study of wars. A few renowned authors have spoken on the subject, considering the hypothesis of the periodicity of wars to be a credible one, and have contributed to that field of study. These authors are considered the leading experts on the topic and are cited herein. I thank them for their thoughts, which were useful in completing this study.

Quincy Wright structured war studies in the Anglo-Saxon world from his work "A study of War"[9].

To summarize what he thinks, we can take a simple extract:

 "There has been some periodicity in the frequency and intensity of warfare in particular states and state systems, but these fluctuations have not been sufficiently regular to permit accurate prediction" (from the "Periodicity of Crises" section in "A Study of War, Volume 2")

Quincy Wright would certainly have appreciated the predictions that were made using the War Cycle.

Gaston Bouthoul was the founder of polemology in France. In his "*Traité de Polémologie*", he considered the periodicity of wars as legitimate and gave a periodicity range. We can consider the War Cycle to be the confirmation of his hypotheses.

Edward R Dewey studied all the cycles that could be imagined, both economic world and war-related. "Systematic Reconnaissance of Cycles in War"[10] is the most interesting article to summarize the cycles he predicted, which were derived from a systematic statistical study over

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[9] Quincy Wright, *A Study of war* , Chicago : University of Chicago Press 1965
[10] Edward R. Dewey, *Systematic Reconnaissance of Cycles in War,* published in Cycles magazine in January 1967

a significant period of time from 1700 to 1913. There is, however, one difference from this study: the events used are the dates of battles, not wars. There may be dozens or even hundreds of battles during what is considered to be a war. He identified cycles of 11.2, 17.4, 23.8, 53.5 and 125.9 years. By carefully analyzing the results of E. Dewey's results, we can consider reusing values around 8.4 or 8.5 years that would then make these cycles consistent with the War Cycle.

Annexes

The « Recurrent » War Cycle - Page 73 of 84
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Appendix A: CONTEXT: Reference Frame

The "War Cycle" represented graphically

Violence/War Amplification Peaks	Amplification Phase	Attenuation Phase	Violence/War Attenuation Peaks

This graphical representation of peaks and amplification phases is regularly used for the analysis of recurrent conflicts or regions

War Events		Peace Events	
	Tensions - Violences		Agreed end of fighting (i.e. Armistice)
	War - Start		Peace Treaty - Dialog
	War - Escalation		

The « Recurrent » War Cycle - Page 74 of 84

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Annexes

Appendix B: Elements of Edward R. Dewey's statistical study "Systematic Reconnaissance of Cycles in War"

Below are two pages extracted from this article: the graph of the statistical peaks followed by the table of the amplitude of the peaks.

Peaks on the chart indicate periods at or near which there may be significant cycles.

The « Recurrent » War Cycle - Page 77 of 84
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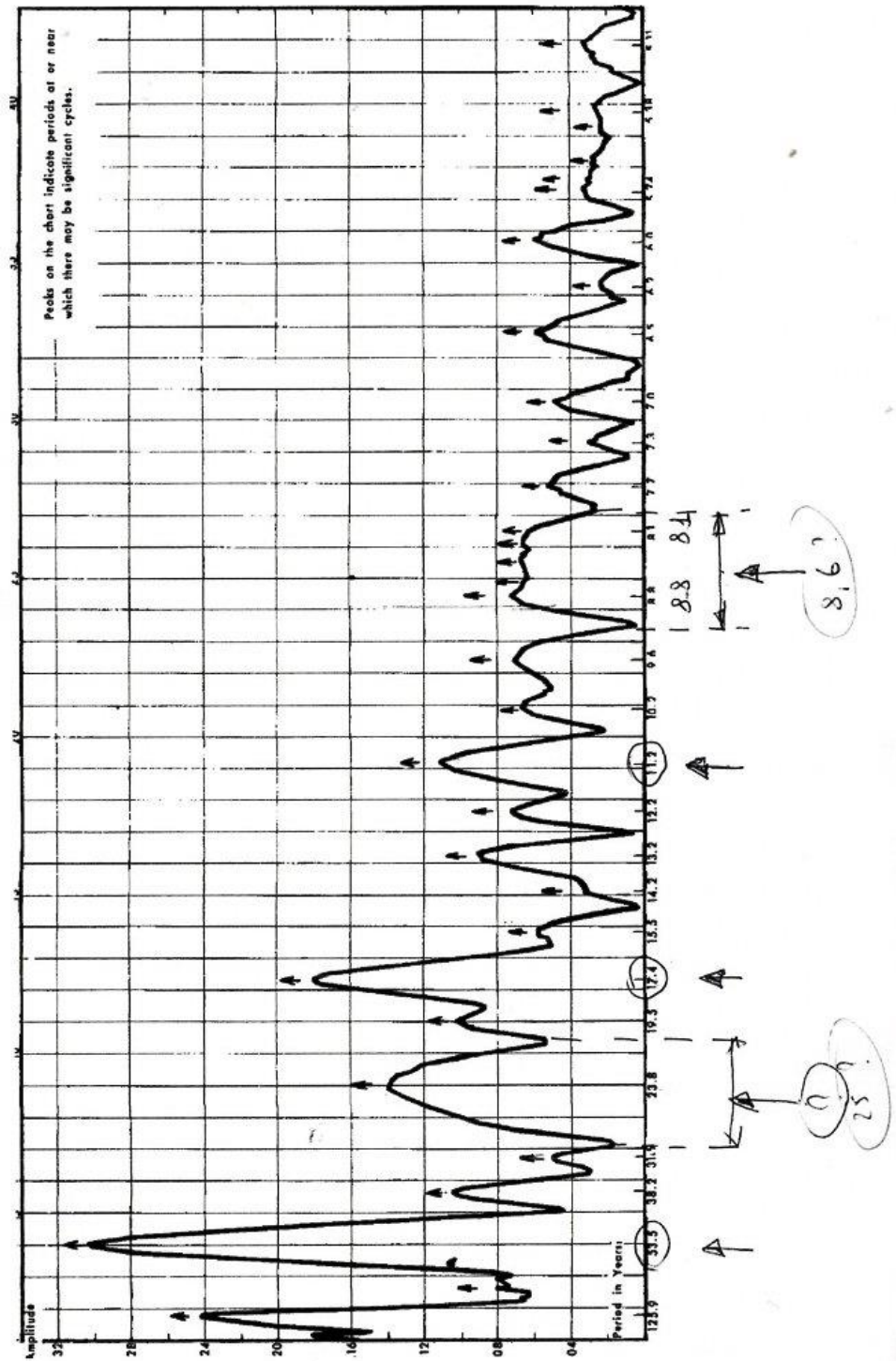
Table 1

Systematic Period Reconnaissance
Index of International Battles,
1700-1913 (Logs of Data Plus One)

Cycle Hint	Fraction of 214 years	Period in Years	Amplitude	Date of Crest	Slope
1	1.7	125.882	.242	2057.02	.008
2	2.6	82.308	.084	2038.79	.004
3	4.0	53.500	.304	1967.17	.023
4	5.6	38.214	.105	1977.99	.011
5	6.7	31.940	.050	1966.87	.006
6	9.0	23.778	.139	1971.54	.023
7	11.0	19.455	.103	1972.62	.021
8	12.3	17.398	.181	1967.02	.042
9	13.8	15.507	.057	1967.80	.015
10	15.1	14.172	.032	1973.65	.009
11	16.2	13.210	.091	1971.20	.028
12	17.6	12.159	.073	1976.12	.024
13	19.1	11.204	.110	1971.29	.040
14	20.9	10.239	.066	1974.54	.026
15	22.4	9.554	.070	1971.85	.030
16	24.4	8.771	.073	1972.73	.033
17	24.9	8.594	.066	1968.81	.031
18	25.5	8.392	.067	1972.95	.032
19	26.1	8.199	.066	1969.83	.032
20	26.5	8.076	.061	1967.86	.030
21	27.9	7.670	.052	1969.85	.027
22	29.3	7.304	.030	1972.25	.017
23	30.6	6.994	.048	1968.49	.028
24	32.8	6.524	.059	1971.02	.036
25	34.3	6.239	.024	1965.02	.015
26	35.7	5.994	.059	1967.51	.040
27	37.3	5.737	.033	1969.65	.023
28	37.6	5.692	.032	1968.62	.022
29	38.2	5.602	.027	1966.70	.019
30	39.3	5.445	.025	1968.21	.018
31	39.8	5.377	.028	1966.50	.021
32	41.9	5.107	.033	1966.24	.026

(handwritten annotation: = .333)

(handwritten annotation: = .145)

Annexes

Annexes

References

Gaston Bouthoul, *Traité de Polémologie,* published by Payot "Bibliothèque scientifique Payot ", 1991 edition, following the 1970 update

Edward R. Dewey, *Systematic Reconnaissance of Cycles in War,* published in Cycles magazine in January 1967

Quincy Wright, *A Study of war*, Chicago: University of Chicago Press 1965

Table of contents

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Mail : recurrent.war.cycle@gmail.com

The « Recurrent » War Cycle - Page 83 of 84

This is the reference V2 of the current research - Authorization to copy for research assessment
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List of illustrations

List of tables

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