Timeline Analysis

Analysis of conflicts discussed based on a podcast transcript

We can import Wikipedia data of human history.

In[@]:= webpage = WikipediaData["human history"];

 $\textit{In[*]} := \texttt{contents} = \texttt{TextContents[webpage, VerifyInterpretation} \rightarrow \texttt{True]}$

Out[0]=

String	Туре
Africa	Continent
Africa	EthnicGroup
Africa	GeographicRegion
Africa	GovernmentAgency
300,000 years	Quantity
years	Unit
Africa	Continent
Africa	EthnicGroup
Africa	GeographicRegion
Africa	GovernmentAgency
lce	Cave
Earth	Planet
lce	Cave
lce	GovernmentAgency
12	Time
12,000 years	Quantity
years	Unit
Agricultural Revolution	MilitaryConflict
river	WaterBodyType
Bronze	Color

We can then find how many historical countries there are.

In[*]:= counts = ReverseSort@CountsBy[contents, #Type &]

Out[0]=

Species	19
AdministrativeDivision	18
City	16
Organization	15
TopologicalSpaceType	12
Island	11
Ocean	10
Occupation	9
Mineral	9
PhysicalConstant	8
River	7
Surname	5
AstronomicalObjectType	5
Time	5
Book	4
Element	4
Plant	4
WaterBodyType	4
Cave	4
HistoricalEvent	3

Historical entries are then compiled as interpreted entities.

This code is copied and modified from Vitaly Kaurov of Wolfram Research without his permission.

The source of the code is here: https://community.wolfram.com/groups/-/m/t/852277

The only thing I did is to modify the code so that a more curated selection of historical countries is done.

The Wikipedia page for human history is selected.

This is because the Wikipedia page provides a better curation, as opposed to using a randomly sampling of events.

```
Lower Egypt (4000 BC - 3100 BC) , Indus Valley civilization (3000 BC - 1500 BC)
Akkad (2330 BC - 2200 BC) , Minoan civilization (2700 BC - 1450 BC) , Moche (100 AD - 800 AD) ,
Nazca (300 BC - 800 AD) , Nazca (300 BC - 800 AD) , Teotihuacan Empire (50 AD - 750 AD) ,
Persian Empire (728 BC - 330 BC), Persian Empire (728 BC - 330 BC),
Macedonia (807 BC - 168 BC) , Media (625 BC - 549 BC) , Assyria (2000 BC - 612 BC)
Scythia (700 BC - 100 AD) , Babylonia (1830 BC - 1530 BC) , Assyria (2000 BC - 612 BC)
Media (625 BC - 549 BC) , Media (625 BC - 549 BC) , Persian Empire (728 BC - 330 BC) ,
Parthia (245 BC - 224 AD) , Delian League (478 BC - 404 BC) , Delian League (478 BC - 404 BC) ,
Macedonia (807 BC - 168 BC) , Maurya Empire (322 BC - 185 BC) ,
Gupta Empire (320 AD - 550 AD) , Chola Empire (848 AD - 1279)
Pandyan Kingdom (300 BC - 920 AD), Roman Republic (509 BC - 27 BC),
Western Roman Empire (395 AD - 476 AD) , Byzantine Empire (395 AD - 1453) ,
Byzantine Empire (395 AD - 1453) , Ottoman Empire (1299 - 1923) ,
Byzantine Empire (395 AD - 1453) , Roman Empire (27 BC - 395 AD) , StateHan (403 BC - 230 BC)
StateHan (403 BC - 230 BC) , Axum (100 AD - 940 AD) , Zapotec (525 BC - 1527) ,
Teotihuacan Empire (50 AD - 750 AD), Roman Republic (509 BC - 27 BC),
Roman Empire (27 BC - 395 AD)
                                Roman Empire (27 BC - 395 AD) , StateHan (403 BC - 230 BC)
Three Kingdoms (220 AD - 280 AD)
                                , Roman Republic (509 BC - 27 BC)
Roman Empire (27 BC - 395 AD)
                                 Western Roman Empire (395 AD - 476 AD)
Roman Empire (27 BC - 395 AD)
                                Byzantine Empire (395 AD - 1453)
Roman Empire (27 BC - 395 AD)
                                Holy Roman Empire (962 AD - 1806)
Three Kingdoms (220 AD - 280 AD), Western Roman Empire (395 AD - 476 AD)
Ottoman Empire (1299 - 1923) , Aztec Empire (1428 - 1521) , Inca Empire (1438 - 1533) ,
Byzantine Empire (395 AD - 1453) , Byzantine Empire (395 AD - 1453)
Byzantine Empire (395 AD - 1453)
                               , Seljuk Empire (1037 AD - 1194 AD)
Ottoman Empire (1299 - 1923) , Byzantine Empire (395 AD - 1453)
Rashidun Caliphate (632 AD - 661 AD) , Seljuk Empire (1037 AD - 1194 AD)
Umayyad Caliphate (661 AD - 750 AD) , Samanid Empire (819 AD - 999 AD)
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Timurid Empire (1363 - 1506), Western Roman Empire (395 AD - 476 AD),
Roman Republic (509 BC - 27 BC) , Frankish Empire (450 AD - 843 AD) ,
Frankish Empire (450 AD - 843 AD)
                                   Crusader States (1098 AD - 1489)
Kingdom of Lithuania (1251 - 1263) , Axum (100 AD - 940 AD) , Songhai (1375 - 1591)
Great Zimbabwe (1220 - 1450) , Gupta Empire (320 AD - 550 AD) , Chola Empire (848 AD - 1279)
Tibet (1912 - 1950) , Ashikaga Shogunate (1338 - 1573) , Three Kingdoms (220 AD - 280 AD) ,
Goguryeo (37 BC - 668 AD)
                            Baekje (18 BC - 660 AD), Silla (57 BC - 935 AD),
Silla (57 BC - 935 AD) , Baekje (18 BC - 660 AD) , Goguryeo (37 BC - 668 AD)
Unified Silla (668 AD - 935 AD) , Balhae (698 AD - 926 AD) , Goguryeo (37 BC - 668 AD) ,
Goguryeo (37 BC - 668 AD)
                             Historical Korea (918 AD - 1897) Historical Korea (918 AD - 1897)
Mongol Empire (1206 - 1368)
                             Mongol Empire (1206 - 1368)
                                                            Funan (68 AD - 550 AD)
Khmer Empire (802 AD - 1431), Sukhothai Kingdom (1238 - 1438), Srivijaya (250 AD - 1350),
Champa (192 AD - 1832)
                          Majapahit (1293 - 1527), Malacca Sultanate (1402 - 1511)
Cahokia (650 AD - 1400)
                          Teotihuacan Empire (50 AD - 750 AD)
Aztec Empire (1428 - 1521)
                            Inca Empire (1438 - 1533)
                                                       Inca Empire (1438 - 1533)
Cusco (1195 AD - 1438)
                        Inca Empire (1438 - 1533), Ottoman Empire (1299 - 1923)
Safavid Empire (1501 - 1736)
                             Qajar Empire (1794 - 1925) , Safavid Empire (1501 - 1736)
                              Safavid Empire (1501 - 1736)
Mughal Empire (1526 - 1858)
                                                            Russian Empire (1721 - 1917)
Timurid Empire (1363 - 1506)
                              Polish-Lithuanian Commonwealth (1569 - 1795)
Songhai (1375 - 1591) , Ethiopian Empire (1000 AD - 1974)
                                                            Ashanti Empire (1670 - 1902)
Mughal Empire (1526 - 1858)
                              Mughal Empire (1526 - 1858)
                                                             Mughal Empire (1526 - 1858)
British India (1858 - 1947)
                           Kingdom of Benin (1440 - 1897)
                                                            Historical Korea (918 AD - 1897)
Malacca Sultanate (1402 - 1511)
                                 French Indochina (1887 - 1953)
Kingdom of Hawaii (1795 - 1893)
                                 Aztec Empire (1428 - 1521)
                                                              Inca Empire (1438 - 1533)
United Kingdom of Great Britain (1707 - 1801), French Indochina (1887 - 1953)
Dutch East Indies (1800 - 1942)
                                Ottoman Empire (1299 - 1923)
Austria-Hungary (1867 - 1918)
                               Assyria (2000 BC - 612 BC) , Assyria (2000 BC - 612 BC) ,
Ottoman Empire (1299 - 1923)
                               Union of Soviet Socialist Republics (1922 - 1991)
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North Vietnam (1945 - 1976), Union of Soviet Socialist Republics (1922 - 1991)
         Union of Soviet Socialist Republics (1922 - 1991) , Union of Soviet Socialist Republics (1922 - 1991)
       Now we identify the start dates and end dates of the historical countries.
 In[*]:= startend = DeleteMissing[
           EntityValue[hc, {"Entity", EntityProperty["HistoricalCountry", "StartDate"],
             EntityProperty["HistoricalCountry", "EndDate"]}], 1, 2];
       startend = DeleteCases[startend, {_, _, _Alternatives}]
Out[0]=
           Indus Valley civilization (3000 BC - 1500 BC), Year: -3000,
                                                                     Year: -1500
           Sumer (5300 BC - 1940 BC), Year: -5300, Year: -1940,
          Lower Egypt (4000 BC - 3100 BC), Year: -4000, Year: -3100 },
           Indus Valley civilization (3000 BC - 1500 BC), Year: -3000, Year: -1500
           Akkad (2330 BC - 2200 BC) , Year: -2330 , Year: -2200 |
           Minoan civilization (2700 BC - 1450 BC), Year: -2700, Year: -1450
           Moche (100 AD - 800 AD)
                                      Year: 100 , Year: 800 },
           Nazca (300 BC - 800 AD),
                                    Year: -300 , Year: 800 },
           Nazca (300 BC - 800 AD),
                                     Year: -300,
                                                 Year: 800 \\
           Teotihuacan Empire (50 AD - 750 AD)
                                                 Year: 50,
                                                           Year: 750
           Persian Empire (728 BC - 330 BC),
                                             Year: -728 , Year: -330
           Persian Empire (728 BC - 330 BC)
                                             Year: -728 , Year: -330
           Macedonia (807 BC - 168 BC), Year: -807, Year: -168
          Media (625 BC - 549 BC) , Year: -625 , Year: -549 }
          Assyria (2000 BC - 612 BC)
                                       Year: -2000 , Year: -612 }
           Scythia (700 BC - 100 AD) |, | Year: -700 |, | Year: 100 |},
           Babylonia (1830 BC - 1530 BC) | Year: -1830 | Year: -1530 |
           Assyria (2000 BC - 612 BC)
                                      Year: -2000 , Year: -612 }
           Media (625 BC - 549 BC), Year: -625, Year: -549
          Media (625 BC - 549 BC), Year: -625, Year: -549,
           Persian Empire (728 BC - 330 BC)
                                             Year: -728 | Year: -330 | }
           Parthia (245 BC - 224 AD), Year: -245,
                                                  Year: 224
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Delian League (478 BC - 404 BC)
                                Year: -478,
                                             Year: -404
Delian League (478 BC - 404 BC)
                                Year: -478 , Year: -404
Macedonia (807 BC - 168 BC) , Year: -807 ,
                                         Year: -168
Maurya Empire (322 BC - 185 BC)
                                 Year: -322 , Year: -185
Gupta Empire (320 AD - 550 AD)
                                Year: 320
                                           Year: 550
Chola Empire (848 AD - 1279)
                              Year: 848,
                                         Year: 1279
Pandyan Kingdom (300 BC - 920 AD)
                                   Year: -300 , Year: 920 }
Roman Republic (509 BC - 27 BC)
                                 Year: -509
                                              Wed 16 Jan -27
Western Roman Empire (395 AD - 476 AD), Year: 395,
                                                    Year: 476
Byzantine Empire (395 AD - 1453)
                                 Year: 395 , Sun 29 May 1453
Byzantine Empire (395 AD - 1453)
                                 Year: 395
                                            Sun 29 May 1453
Ottoman Empire (1299 - 1923)
                              Year: 1299
                                          Mon 29 Oct 1923
Byzantine Empire (395 AD - 1453)
                                 Year: 395 Sun 29 May 1453
                                Wed 16 Jan –27 , Year: 395
Roman Empire (27 BC - 395 AD)
StateHan (403 BC - 230 BC), Year: -403, Year: -230,
StateHan (403 BC - 230 BC), Year: -403, Year: -230,
Axum (100 AD - 940 AD)
                        Year: 100 , Year: 940 }
Zapotec (525 BC - 1527)
                         Year: -525,
                                     Year: 1527
Teotihuacan Empire (50 AD - 750 AD)
                                   Year: 50
                                               Year: 750
Roman Republic (509 BC - 27 BC)
                                 Year: -509
                                              Wed 16 Jan –27
Roman Empire (27 BC - 395 AD)
                                Wed 16 Jan – 27 , Year: 395 }
Roman Empire (27 BC - 395 AD)
                                Wed 16 Jan –27
                                                Year: 395
StateHan (403 BC - 230 BC) , Year: -403 , Year: -230
Three Kingdoms (220 AD - 280 AD)
                                  Year: 220 , Year: 280 }
Roman Republic (509 BC - 27 BC)
                                 Year: -509
                                              Wed 16 Jan –27
Roman Empire (27 BC - 395 AD)
                                Wed 16 Jan –27 , Year: 395 }
Western Roman Empire (395 AD - 476 AD), Year: 395, Year: 476 },
Roman Empire (27 BC - 395 AD)
                                Wed 16 Jan –27
                                                Year: 395
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Byzantine Empire (395 AD - 1453)
                                 Year: 395,
                                            Sun 29 May 1453
Roman Empire (27 BC - 395 AD) |, | Wed 16 Jan -27 |, | Year: 395 |
Holy Roman Empire (962 AD - 1806), Sun 2 May 962,
                                                  Thu 6 Nov 1806
Three Kingdoms (220 AD - 280 AD)
                                  Year: 220 , Year: 280 }
Western Roman Empire (395 AD - 476 AD)
                                        Year: 395
Ottoman Empire (1299 - 1923)
                                           Mon 29 Oct 1923
                              Year: 1299,
Aztec Empire (1428 - 1521)
                           Year: 1428 , Sat 13 Aug 1521 }
                          Year: 1438
Inca Empire (1438 - 1533)
                                      Year: 1533
Byzantine Empire (395 AD - 1453)
                                 Year: 395
                                             Sun 29 May 1453
Byzantine Empire (395 AD - 1453)
                                 Year: 395
                                            Sun 29 May 1453
Byzantine Empire (395 AD - 1453)
                                  Year: 395
                                             Sun 29 May 1453
Seljuk Empire (1037 AD - 1194 AD)
                                  Year: 1037,
                                               Year: 1194
Ottoman Empire (1299 - 1923) | Year: 1299 | Mon 29 Oct 1923 |
                                 Year: 395
Byzantine Empire (395 AD - 1453)
                                             Sun 29 May 1453
Rashidun Caliphate (632 AD - 661 AD), Year: 632, Year: 661,
Seljuk Empire (1037 AD - 1194 AD)
                                  Year: 1037 , Year: 1194 }
Umayyad Caliphate (661 AD - 750 AD)
                                                 Year: 750
                                     Year: 661
                                   Year: 819
Samanid Empire (819 AD - 999 AD)
                                              Year: 999
Timurid Empire (1363 - 1506), Year: 1363,
                                         Year: 1506
Western Roman Empire (395 AD - 476 AD), Year: 395,
                                                    Year: 476
Roman Republic (509 BC - 27 BC)
                                  Year: -509
                                              Wed 16 Jan –27
Frankish Empire (450 AD - 843 AD),
                                  Year: 450
                                              Year: 843
Frankish Empire (450 AD - 843 AD)
                                  Year: 450,
                                              Year: 843
Crusader States (1098 AD - 1489)
                                 Year: 1098,
                                             Year: 1489
Kingdom of Lithuania (1251 - 1263)
                                  Mon 17 Jul 1251
                                                   Year: 1263
Axum (100 AD - 940 AD) ,
                        Year: 100
                                     Year: 940
Songhai (1375 - 1591), Year: 1375,
                                   Year: 1591
Great Zimbabwe (1220 - 1450)
                             Year: 1220
                                          Year: 1450
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Gupta Empire (320 AD - 550 AD), Year: 320,
                                           Year: 550
Chola Empire (848 AD - 1279), Year: 848, Year: 1279
Tibet (1912 - 1950), Year: 1912,
                                Year: 1950
Ashikaga Shogunate (1338 - 1573), Mon 11 Aug 1338,
                                                   Sun 2 Sep 1573
Three Kingdoms (220 AD - 280 AD)
                                 Year: 220 , Year: 280 }
Goguryeo (37 BC - 668 AD)
                           Year: -37
                                       Year: 668
Baekje (18 BC - 660 AD)
                        Year: -18 , Wed 18 Jul 660
Silla (57 BC - 935 AD)
                      Year: -57
                                  Year: 935
Silla (57 BC - 935 AD)
                     Year: -57
                                  Year: 935
Baekje (18 BC - 660 AD), Year: -18, Wed 18 Jul 660,
Goguryeo (37 BC - 668 AD)
                           Year: -37
                                      Year: 668
Unified Silla (668 AD - 935 AD)
                             Year: 668,
                                         Year: 935
Balhae (698 AD - 926 AD)
                         Year: 698
                                     Mon 14 Jan 926
Goguryeo (37 BC - 668 AD)
                           Year: -37
                                       Year: 668
Goguryeo (37 BC - 668 AD)
                           Year: -37
                                       Year: 668
Historical Korea (918 AD - 1897), Year: 918, Year: 1897
Historical Korea (918 AD - 1897)
                                           Year: 1897
                               Year: 918,
Mongol Empire (1206 - 1368)
                             Year: 1206,
                                        Year: 1368
Mongol Empire (1206 - 1368)
                            Year: 1206
                                        Year: 1368
Funan (68 AD - 550 AD), Year: 68,
                                   Year: 550
Khmer Empire (802 AD - 1431), Year: 802, Year: 1431
Sukhothai Kingdom (1238 - 1438)
                                Year: 1238 , Year: 1438
Srivijaya (250 AD - 1350), Year: 250, Year: 1350,
Champa (192 AD - 1832), Year: 192,
                                    Year: 1832
Majapahit (1293 - 1527)
                        Fri 20 Nov 1293
                                       Year: 1527
Malacca Sultanate (1402 - 1511)
                               Year: 1402 , Year: 1511
Cahokia (650 AD - 1400)
                        Year: 650 , Year: 1400 },
Teotihuacan Empire (50 AD - 750 AD)
                                    Year: 50,
                                               Year: 750
```

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Aztec Empire (1428 - 1521)
                            Year: 1428 ,
                                         Sat 13 Aug 1521
Inca Empire (1438 - 1533)
                           Year: 1438,
                                       Year: 1533
Inca Empire (1438 - 1533)
                           Year: 1438
                                        Year: 1533
Cusco (1195 AD - 1438), Year: 1195,
                                     Year: 1438
Inca Empire (1438 - 1533)
                           Year: 1438
                                       Year: 1533
Ottoman Empire (1299 - 1923)
                                            Mon 29 Oct 1923
                               Year: 1299,
Safavid Empire (1501 - 1736)
                              Year: 1501,
                                          Year: 1736
Qajar Empire (1794 - 1925)
                            Year: 1794,
                                         Year: 1925
Safavid Empire (1501 - 1736)
                                          Year: 1736
                              Year: 1501,
Mughal Empire (1526 - 1858)
                              Wed 21 Apr 1526 , Sun 20 Jun 1858 }
Safavid Empire (1501 - 1736)
                              Year: 1501,
                                         Year: 1736
Russian Empire (1721 - 1917)
                              Wed 22 Oct 1721,
                                                Wed 7 Nov 1917
Timurid Empire (1363 - 1506)
                                         Year: 1506
                              Year: 1363
Polish-Lithuanian Commonwealth (1569 - 1795)
                                                              Sat 24 Oct 1795
                                             Tue 1 Jul 1569
Songhai (1375 - 1591)
                       Year: 1375
                                    Year: 1591
                                               Year: 1974
Ethiopian Empire (1000 AD - 1974), Year: 1000,
Ashanti Empire (1670 - 1902)
                              Year: 1670,
                                          Jan 1902
Mughal Empire (1526 - 1858)
                              Wed 21 Apr 1526,
                                                Sun 20 Jun 1858
Mughal Empire (1526 - 1858)
                              Wed 21 Apr 1526
                                                Sun 20 Jun 1858
Mughal Empire (1526 - 1858)
                              Wed 21 Apr 1526,
                                                Sun 20 Jun 1858
British India (1858 - 1947)
                          Mon 2 Aug 1858,
                                            Fri 15 Aug 1947
Kingdom of Benin (1440 - 1897)
                                Year: 1440,
                                             Year: 1897
Historical Korea (918 AD - 1897)
                                Year: 918,
                                            Year: 1897
Malacca Sultanate (1402 - 1511)
                                Year: 1402
                                             Year: 1511
French Indochina (1887 - 1953)
                               Mon 17 Oct 1887
                                                  Mon 9 Nov 1953
Kingdom of Hawaii (1795 - 1893),
                                Year: 1795
                                              Tue 17 Jan 1893
Aztec Empire (1428 - 1521)
                            Year: 1428 , Sat 13 Aug 1521 },
Inca Empire (1438 - 1533)
                           Year: 1438,
                                       Year: 1533
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United Kingdom of Great Britain (1707 - 1801), Sun 1 May 1707, Thu 1 Jan 1801
                                                   Mon 9 Nov 1953
French Indochina (1887 - 1953)
                                 Mon 17 Oct 1887
                                 Wed 1 Jan 1800 ,
Dutch East Indies (1800 - 1942) ,
                                                    Mar 1942
Ottoman Empire (1299 - 1923)
                                 Year: 1299
                                              Mon 29 Oct 1923
Austria-Hungary (1867 - 1918)
                                 Sat 30 Mar 1867
                                                   Thu 31 Oct 1918
                              Year: -2000
Assyria (2000 BC - 612 BC)
                                             Year: -612
Assyria (2000 BC - 612 BC)
                              Year: -2000,
                                            Year: -612
Ottoman Empire (1299 - 1923)
                                 Year: 1299
                                              Mon 29 Oct 1923
Union of Soviet Socialist Republics (1922 - 1991)
                                                  Sat 30 Dec 1922
                                                                    Thu 26 Dec 1991
North Vietnam (1945 - 1976)
                                                Fri 2 Jul 1976
                               Sun 2 Sep 1945,
Union of Soviet Socialist Republics (1922 - 1991)
                                                  Sat 30 Dec 1922
                                                                    Thu 26 Dec 1991
Union of Soviet Socialist Republics (1922 - 1991)
                                                  Sat 30 Dec 1922
                                                                    Thu 26 Dec 1991
Union of Soviet Socialist Republics (1922 - 1991)
                                                  Sat 30 Dec 1922
                                                                    Thu 26 Dec 1991
```

We can then plot a timeline of all the historical countries mentioned in this notebook.

In[@]:= TimelinePlot[Association@@

Thread[EntityValue[startend[All, 1], "Name"] → (Interval /@ startend[All, 2;; 3])],
Filling → Below, FillingStyle → Directive[Opacity[.2], Orange],
PerformanceGoal → "Speed", ImageSize → Full]

Out[0]=

