

project 1

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10/10/2019

Project 1

```
#intro! :D
#terrorist group data
terrorG <- read.csv("TerroristGroups.csv", header=TRUE, sep=",")

#Global Terrorism Database information
trrGTD1 <- read.csv("GlobalTerrorismDatabase.csv", header=TRUE, sep=",")
trrGTD <- trrGTD1[sample(1:nrow(trrGTD1), 100,
  replace=FALSE),]
#glimpse(trrGTD)

#common variable = country!
```

Preparing my Data:

Preface:

In the following chunks I performed a few operations that ultimately reduced the size and complexity of these sets. This is because I have enormous difficulty with visualizing and understanding large sets of data. Additionally, I was more interested in some variables and countries than others and thought I would have more fun working with reduced sets.

The sets of data I chose were on terrorist groups and attacks. The first is from a data set provided by Joshua Tchantret (<https://jtschantret.com/data/> (<https://jtschantret.com/data/>)) and the second was from a set in the Global Terrorism Database (GTD)! The first set contained information on historical terror groups relevant between 1860-1969 such as: group name, ideology, country, ambiguity status, and Start and End year. The most interesting information from this set was its ambiguity status. I had never imagined that a terror group might be undefined in our understanding of its alignment! I was intrigued to say the least but you might see that later on.

The second set was from the GTD had tons of data on terrorist attacks from around the world. It had so many variables, I was fairly overwhelmed. Beside their shared variable 'Country', this data set had many, many other variables such as: City, region, who the attack was on, outcome of attack (description), target of attack, nationality of the attack target, etcetera. This data set I found more confusing not only due to its size but by the existence of secondary and tertiary variables. For example, for its Attack-Type variable, it also contained 2 additional variables that I assumed were for further categorization or tagging to make searches more accurate. However, the frequency at which variables contained even a second data point - let alone a third - was extremely low!

To wrap up, I chose these datasets because I wanted to evaluate something interesting (world events), relevant, and understandable. I had spent many hours looking at sets with data on drugs, side effects, and everything related and I found myself spending a disproportionate amount of time studying related topics to understand the data. Between the two sets, I do expect to see similarities between countries in terms of attack events and terror groups but I can see that the data is fairly different and this is all I am expecting before diving in.

```

##          Country
## 1          USA
## 2          Russia
## 3          USA
## 4          USA
## 5          USA
## 6          Russia
## 7          China
## 8          USA
## 9          USA
## 10         USA
## 11         India
## 12         USA
## 13         Russia
## 14         Russia
## 15         Russia
## 16         Russia
## 17         France
## 18         Ireland/US
## 19         Japan
## 20         UK
## 21         France
## 22         Russia/ Poland
## 23         Spain
## 24         France
## 25         Russia
## 26         Russia
## 27         Ottomon Empire
## 28         Russia
## 29         Russia
## 30         Ottomon Empire
## 31         Russia/ Ottomon Empire
## 32         Argentina
## 33         Russia/France
## 34         France
## 35         Ottomon Empire
## 36         India
## 37         Ottomon Empire
## 38         Ottomon Empire
## 39         Ottomon Empire
## 40         Ottomon Empire
## 41         Russia
## 42         Ottomon Empire
## 43         Russia
## 44         Russia
## 45         Japan
## 46         Russia
## 47         Serbia
## 48         India
## 49         Russia
## 50         India
## 51         Russia
## 52         Russia
## 53         Russia
## 54         UK
## 55         Serbia
## 56         Russia/Finland
## 57         Russia
## 58         Spain
## 59         Egypt
## 60         India
## 61         Russia
## 62         Russia
## 63         Russia
## 64         Russia
## 65         Russia
## 66         Russia
## 67         Russia
## 68         Russia
## 69         Spain
## 70         UK
## 71         India
## 72         Mexico
## 73         Russia
## 74         Russia
## 75         Russia
## 76         Russia

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## 77          Russia
## 78          USA
## 79          India
## 80          Russia
## 81          Russia
## 82          Russia
## 83          Russia
## 84          Russia (Poland)
## 85 Bosnia (Austria-Hungary)
## 86          Mexico
## 87          Portugal
## 88          Russia
## 89          Serbia
## 90          Argentina
## 91          China
## 92          Japan
## 93          Russia (Poland)
## 94          Spain
## 95          France
## 96          Ottomon Empire/France
## 97          Serbia
## 98          Serbia
## 99          UK
## 100         Ottomon Empire
## 101         UK
## 102         UK
## 103         USA
## 104         Egypt
## 105         Ottomon Empire
## 106         USA
## 107         USA
## 108         UK
## 109         Egypt
## 110         Italy
## 111         China
## 112         Mand Palest
## 113         Spain
## 114         Germany
## 115         China
## 116         Italy
## 117         Canada
## 118         Ireland
## 119         Japan
## 120         USA (Puerto Rico)
## 121         Spain
## 122         Bulgaria
## 123         China
## 124         Germany
## 125         Japan
## 126         China
## 127         USA
## 128         Japan
## 129         Argentina
## 130         China
## 131         India
## 132         Romania
## 133         Spain
## 134         India
## 135         India
## 136         Austria
## 137         Mand Palest
## 138         Yugoslavia
## 139         Japan
## 140         Mand Palest
## 141         China
## 142         China
## 143         China
## 144         China
## 145         China
## 146         China
## 147         Cuba
## 148         Mand Palest
## 149         Mand Palest
## 150         China
## 151         Mand Palest
## 152         Japan
## 153         Afghanistan

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## 154          China
## 155          Egypt
## 156          Spain
## 157          Spain
## 158      Mand Palest
## 159          France
## 160          China
## 161          China
## 162          China
## 163          China
## 164          France
## 165          France
## 166      Mand Palest
## 167      South Africa
## 168          Yugoslavia
## 169          Indonesia
## 170          Israel
## 171          USA
## 172          Algeria
## 173          Israel
## 174          USA
## 175          Israel
## 176          China
## 177          France
## 178          Cuba
## 179          Israel
## 180          Algeria
## 181          Algeria
## 182          Cyprus
## 183          India
## 184          USA
## 185          Italy
## 186          Italy
## 187      Palestine/ Egypt
## 188      Syria, Egypt, Lebanon
## 189          Spain
## 190          USA
## 191          Argentina
## 192      Mozambique, Portugal
## 193          Canada
## 194          USA
## 195          Guatemala
## 196          Brazil
## 197          Burundi
## 198      Eritrea, Ethiopia, Egypt
## 199          Germany
## 200          Portugal
## 201      South Africa
## 202          Canada
## 203          USA
## 204          Japan
## 205          UK
## 206          UK
## 207          France
## 208          Thailand
## 209          Angola
## 210          Australia
## 211          Uruguay
## 212          Algeria
## 213          Canada
## 214          Algeria
## 215          Colombia
## 216          Colombia
## 217          Palestein
## 218          USA
## 219          USA
## 220          Brazil
## 221          Indonesia
## 222          Syria
## 223          Argentina
## 224          Bolivia
## 225          France
## 226          Ireland
## 227          Syria
## 228      North Yemen
## 229          Syria
## 230          USA

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## 231          USA
## 232          Chile
## 233      Somalia, Djibouti
## 234          Egypt, Lebanon
## 235          India
## 236          Greece
## 237          Lebanon
## 238          Argentina
## 239          Brazil
## 240          Brazil
## 241          Brazil
## 242          Chile
## 243      United States
## 244          USA
## 245          France
## 246          France
## 247          Germany
## 248      Iraq/Palestine
## 249      Lebanon, Syria
## 250      Malaysia, Thailand
## 251          Palestine
## 252          UK
## 253          USA
## 254          USA
## 255          USA
## 256          Brazil
## 257          India
## 258      Argentina
## 259          Italy
## 260          Japan
## 261          Japan
## 262      Philippines
## 263          UK
## 264      Philippines
## 265          USA
## 266          USA
## 267      Venezuela
## 268          Lebanon
## 269
## 270
##          Group
## 1          Molly Maguires
## 2      The Organization (Hell)
## 3          Ku Klux Klan I
## 4          Southern Cross
## 5          Knights of the White Camellia
## 6      People's Retribution (Society of the Axe)
## 7          Elder Brother's Society
## 8          Clan na Gael
## 9          The White Line
## 10         White League
## 11         Ramoshi
## 12         Red Shirts
## 13         Land and Freedom
## 14      Executive Committee of the Social Revolutionary Party
## 15         Black Repartition
## 16         People's Will
## 17         The Panther of Batignolles
## 18         Skirmishers
## 19      Genyosha (Black Ocean Society)
## 20         Irish National Invincibles
## 21         Bande Noir
## 22         Proletariat Party
## 23         Mano Negra
## 24         Les Egaux de Montmartre
## 25         Liberation of Labor
## 26      Terrorist Faction of the People's Will
## 27         Social Democrat Hunchakian Party
## 28         Ulyanov Conspiracy
## 29         Second Proletariat Party
## 30         Committee of Union and Progress
## 31         Armenian Revolutionary Federation
## 32         Radical Civic Union
## 33         Polish Socialist Party
## 34         Les Revoltes
## 35         Internal Macedonian Rev Org
## 36      Society for the Removal of Obstacles to the Hindu Religion (Chapekar Group)

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## 37           Supreme Macedonian-Adrianople Committee
## 38           Ottoman Revolutionary Party
## 39           Bulgarian Secret Revolutionary Brotherhood
## 40           Society against Serbs
## 41           Russian Social Democratic Labor Party
## 42           Assassins of Salonica
## 43           Socialist Union
## 44           Polish Socialist Party "Proletariat"
## 45           Black Dragon Society (Amur Society)
## 46           Polish Workers' Socialist Party
## 47           Black Hand
## 48           Anushilan Samiti
## 49           Socialist Revolutionary Party (Combat Org)
## 50           Abhinav Bharat Society
## 51           International Group "Struggle"
## 52           Uncompromising Ones
## 53           Black Banner
## 54           Women's Social and Political Union
## 55           Serbian Committee
## 56           Finnish Party of Active Resistance
## 57           Combat Org of Polish Socialist Party
## 58           Comite de Accion
## 59           Society of Fraternal Solidarity
## 60           Dhaka Anushilan Samiti (Amushilan Samiti)
## 61           Horror
## 62           Death to the Capital
## 63           Red Hundreds
## 64           Without Authority (Black Banner)
## 65           Union of the Russian People (Black Hundreds)
## 66           Georgian Social Democrats
## 67           Independent Socialists-Revolutionaries
## 68           Death for Death
## 69           Juventud Libertaria
## 70           India House
## 71           Jugantar
## 72           Obreros Libres
## 73           Caucasian All Muslim Union (Dfai)
## 74           Federal Committee of Riga
## 75           Prawica (PPS - Revolutionary Faction)
## 76           Black Terror
## 77           Terror Group of the City of Tiflis and its Counties
## 78           International Association of Bridge and Iron Workers
## 79           Maniktala Group
## 80           Anarchist Black Cross
## 81           Group of Terrorists-Expropriators
## 82           League of the Red Fuse
## 83           Green Hundreds
## 84           Warsaw Group of Anarchists-Communists-International
## 85           Young Bosnia
## 86           Junta Organization de PLM
## 87           Costa Cell
## 88           Union of Active Struggle
## 89           Narodna Odbrana
## 90           Argenitian Anarchists
## 91           Chinese Assassination Corps
## 92           Japanese Anarchists
## 93           Revolutionary Avengers
## 94           Confederacion Nacional del Trabajo (CNT)
## 95           The Bonnot Gang
## 96           Young Arab Society
## 97           Black Hand
## 98           Young Bosnia
## 99           Ulster Volunteers
## 100          Covenant Society
## 101          Irish Volunteers
## 102          Ulster Volunteer Force
## 103          Ghadar Party
## 104          Society of the Arab Revolution
## 105          The Banner's Society
## 106          Galleanisti Anarchists
## 107          Ku Klux Klan II
## 108          Irish Republican Army I
## 109          Wafd Party
## 110          Red Guards
## 111          Uiyeooldan (Righteous Group)
## 112          Haganah
## 113          Los Justicieros

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## 114      Organisation Consul
## 115      Black Youth League
## 116      Arditi del Popolo
## 117      Ku Klux Klan of Canada
## 118      Irish Republican Army II
## 119      Guillotine Society
## 120      Puerto Rican Nationalist Party
## 121      Los Solidarios
## 122      Shestorki of the Bulgarian Communist Party
## 123      Damuldan
## 124      Viking League
## 125      Society of Malcontents
## 126      Society of Taiwanese and Korean Comrades
## 127      Black Legion
## 128      Young Officers Movement
## 129      Culmine (Di Giovanni cell)
## 130      Red Terror Squad
## 131      Naujawan Bharat Sabha (Youth Society of India)
## 132      Iron Guard
## 133      Iberian Anarchist Federation (FAI)
## 134      Bengal Volunteers
## 135      Hindustan Socialist Republican Assoc
## 136      Organization of Ukranian Nationalists
## 137      The Green Hand
## 138      Ustaše
## 139      Sakura (Cherry Society)
## 140      Black Hand
## 141      League of Korean Youth in South China
## 142      Korean Patriotic Organization
## 143      League of Resisting Japan and Saving the Nation
## 144      Vigorous Blood Group
## 145      Eradicating Traitors Group
## 146      Black Terror Group (Possibly part of LKYSC)
## 147      ABC
## 148      Irgun
## 149      Army of the Holy War
## 150      Blue Shirts Society
## 151      Holy War Organization
## 152      League of Blood Society
## 153      Abdul Khaliq Group
## 154      Black Terrorist Party
## 155      Young Egypt
## 156      Spanish Phalanx
## 157      Falange (pistoleros)
## 158      Avenging Youth
## 159      Comité Secret d'Action Révolutionnaire (La Cagoule)
## 160      Special Services Corps
## 161      Chinese Youths National Salvation Association
## 162      Yellow Way Society
## 163      Blood and Soul Traitors-Extermination Corps
## 164      Compagnie du Mystère
## 165      Mouvement Social Révolutionnaire
## 166      Lehi
## 167      Stormjaers
## 168      Chetniks
## 169      Darul Islam
## 170      Nakam
## 171      The Columbians
## 172      Special Organization
## 173      Brit HaKana'im
## 174      Ku Klux Klan III
## 175      Palestinian Fedayeen
## 176      Doumu Tan
## 177      Red Hand
## 178      26th of July Movement
## 179      Kingdom of Israel
## 180      Revolutionary Committee of Unity and Action
## 181      FLN
## 182      EOKA
## 183      Ananda Marga
## 184      Original Ku Klux Klan of the Confederacy
## 185      South Tyrolean Liberation Committee (BAS)
## 186      Ordine Nuovo
## 187      al-Fatah
## 188      Palestine Liberation Front
## 189      ETA
## 190      Cuban Nationalist Movement (CNM)

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## 191           People's Revolutionary Army
## 192           Armed Revolutionary Action
## 193           Brigade d'autodéfense du français
## 194           United Klans of America
## 195           Rebel Armed Forces
## 196           Communist Party of Brazil
## 197           Inyenzi
## 198           Eritrean Liberation Front
## 199           Gruppe um Dr. Burger
## 200           Henrique Galvão Group
## 201           MK (ANC)
## 202           Front de Liberation du Quebec (FLQ)
## 203           Alpha 66
## 204           Chukakuha
## 205           Mudiad Amddiffyn Cymru
## 206           Band of Mercy
## 207           Breton Liberation Front
## 208           Barisan Revolusi Nasional
## 209           Front for the Liberation of the Cabinda Enclave
## 210           Croatian Revolutionary Brotherhood (CRB)
## 211           Tupamaros
## 212           Front of Socialist Forces
## 213           Quebec Liberation Front
## 214           Canary Islands Independence Movement
## 215           ELN
## 216           FARC
## 217           Popular Front for the Liberation of Palestine (PFLP)
## 218           Silver Dollar Group
## 219           White Knights of Mississippi
## 220           Popular Revolutionary Vanguard
## 221           Free Papua Movement
## 222           Phalanxes of Mohammed
## 223           Operativo Condor
## 224           National Liberation Army
## 225           Federation for European Nationalist Action
## 226           Ulster Volunteer Force
## 227           Al-Saiqa
## 228           Arabian People's Union
## 229           As-Saiqa
## 230           Black Panthers
## 231           Independent Armed Revolutionary Movement
## 232           Movement of the Revolutionary Left (MIR)
## 233           Front for the Liberation of the French Somali Coast
## 234           Islamic Liberation Organization
## 235           All Bodo Students Union
## 236           Free Greeks
## 237           Palestinian Popular Struggle Front
## 238           Frente de Liberacion Nacional del Vietnam del Sur
## 239           VAR-Palmares
## 240           Alianca Libertadora Nacional
## 241           Revolutionary Movement of Oct 8
## 242           People's Organized Vanguard
## 243           Cuban Power
## 244           Armed Commando of Liberation
## 245           March 22 Movement
## 246           Proletarian Left
## 247           Red Army Faction
## 248           Arab Liberation Front
## 249           Popular Front for the Liberation of Palestine, GC
## 250           Pattani United Liberation Organization
## 251           Democratic Front for the Liberation of Palestine
## 252           Angry Brigade
## 253           Republic of New Africa
## 254           Up Against the Wall Motherfuckers
## 255           Jewish Defense League
## 256           Democratic Resistance
## 257           Maoist Communist Center
## 258           People's Revolutionary Army
## 259           October 22 Circle
## 260           Red Army Faction
## 261           Kakurokyo
## 262           New People's Army
## 263           Provisional IRA
## 264           Moro National Liberation Front
## 265           Secret Army Organization
## 266           The Weathermen
## 267           Red Flag

```


## 268				Al-Tanzim
## 269				
## 270		* denotes provincial level unit rather than city		
##	City	StrYear	Ideology	Ambiguous
## 1	Pennsylvania*	1862	Other	0
## 2	Moscow	1864	Anarchist	0
## 3	Pulaski	1865	Rightist	0
## 4	New Orleans	1865	Rightist	0
## 5	Franklin, Louisiana	1867	Rightist	0
## 6	Moscow	1869	Leftist	0
## 7	Hunan*	1870	Other	1
## 8	New York City	1873	Nationalist	0
## 9	Vicksburg Mississippi	1874	Rightist	0
## 10	Colfax	1874	Rightist	1
## 11	Deccan Region*	1875	Nationalist	1
## 12	Charleston and Mississippi*	1875	Rightist	1
## 13	Saint Petersburg	1876	Leftist	0
## 14	Kiev (Ukraine)	1878	Leftist	0
## 15	Saint Petersburg	1879	Anarchist	0
## 16	Saint Petersburg	1879	Anarchist	0
## 17	Paris	1880	Anarchist	1
## 18	New York City	1881	Nationalist	0
## 19	Tokyo / Fukuoka	1881	Nationalist	1
## 20	Dublin	1881	Nationalist	0
## 21	Paris (Lyons)	1882	Anarchist	0
## 22	Warsaw	1882	Leftist	0
## 23	Andalusia	1882	Anarchist	1
## 24	Paris	1883	Anarchist	0
## 25	Geneva	1883	Leftist	1
## 26	Saint Petersburg	1886	Leftist	0
## 27	Geneva	1887	Leftist	0
## 28	Saint Petersburg	1887	Leftist	0
## 29	Warsaw/Paris	1888	Leftist	0
## 30	Constantinople	1889	Nationalist	0
## 31	Tiflis	1890	Nationalist	0
## 32	Buenos Aires	1891	Leftist	0
## 33	Paris	1892	Leftist	1
## 34	Paris	1893	Anarchist	1
## 35	Salonica (Thessaloniki)	1893	Nationalist	0
## 36	Pune	1895	Nationalist	0
## 37	Macedonia*	1895	Nationalist	0
## 38	Geneva	1897	Nationalist	0
## 39	Salonica (Thessaloniki)	1897	Rightist	0
## 40	Salonica (Thessaloniki)	1897	Nationalist	0
## 41	Minsk	1898	Leftist	0
## 42	Salonica (Thessaloniki)	1898	Anarchist	0
## 43	Baltics*	1899	Leftist	0
## 44	Lvov (Ukraine)	1900	Leftist	0
## 45	Tokyo	1901	Rightist	1
## 46	Warsaw	1901	Leftist	0
## 47	Belgrade	1901	Nationalist	0
## 48	Calcutta	1902	Nationalist	0
## 49	Saint Petersburg	1902	Leftist	0
## 50	Pune (maybe Nasik?)	1903	Nationalist	0
## 51	Belostok	1903	Anarchist	0
## 52	Odessa	1903	Anarchist	0
## 53	Belostok, Odessa, Nezhin	1903	Anarchist	0
## 54	Manchester	1903	Leftist	0
## 55	Belgrade	1903	Nationalist	0
## 56	Helsinki	1904	Nationalist	0
## 57	Warsaw	1904	Leftist	0
## 58	Barcelona	1904	Anarchist	1
## 59	Cairo	1905	Nationalist	0
## 60	Dhaka	1905	Nationalist	0
## 61	Georgia/Armenia*	1905	Anarchist	0
## 62	Georgia/Armenia*	1905	Anarchist	0
## 63	Telavi	1905	Other	0
## 64	Saint Petersburg	1905	Anarchist	0
## 65	Saint Petersburg	1905	Rightist	0
## 66	Tiflis	1905	Leftist	0
## 67	Gomel	1905	Anarchist	0
## 68	Saint Petersburg	1905	Anarchist	0
## 69	Barcelona	1905	Leftist	0
## 70	London	1905	Nationalist	1
## 71	Calcutta	1906	Nationalist	0
## 72	Orizaba	1906	Leftist	0
## 73	North Caucasus	1906	Nationalist	0

## 74	Riga	1906	Other	0
## 75	Lvov	1906	Leftist	0
## 76	Kiev	1906	Anarchist	0
## 77	Tiflis	1906	Anarchist	0
## 78	Pittsburgh	1906	Anarchist	0
## 79	Calcutta	1907	Nationalist	0
## 80	.	1907	Anarchist	0
## 81	Saint Petersburg	1907	Anarchist	0
## 82	Voronezh	1907	Leftist	1
## 83	Baku	1907	Anarchist	1
## 84	Warsaw	1907	Anarchist	0
## 85	.	1907	Nationalist	0
## 86	Saint Louis (Mexico City??)	1908	Leftist	0
## 87	Lisbon	1908	Leftist	0
## 88	Lvov	1908	Anarchist	0
## 89	.	1908	Nationalist	0
## 90	Buenos Aires	1909	Anarchist	0
## 91	Hong Kong	1910	Anarchist	0
## 92	Nagano Prefecture	1910	Anarchist	0
## 93	Lodz	1910	Anarchist	0
## 94	Barcelona	1910	Anarchist	0
## 95	Paris	1911	Anarchist	1
## 96	Paris	1911	Nationalist	0
## 97	Belgrade	1911	Nationalist	0
## 98	Belgrade	1911	Nationalist	0
## 99	Belfast	1912	Nationalist	1
## 100	Damascus	1913	Nationalist	0
## 101	Dublin	1913	Nationalist	0
## 102	Belfast	1913	Nationalist	1
## 103	Stockton	1913	Nationalist	1
## 104	Cairo	1914	Nationalist	0
## 105	Mosul	1914	Nationalist	0
## 106	New York City	1914	Anarchist	0
## 107	Atlanta	1915	Rightist	0
## 108	Dublin	1917	Nationalist	0
## 109	Cairo	1918	Nationalist	0
## 110	Turin/Milan	1918	Anarchist	0
## 111	Shanghai	1919	Anarchist	0
## 112	Jerusalem	1920	Nationalist	0
## 113	San Sebastian	1920	Anarchist	0
## 114	Munich	1921	Rightist	0
## 115	Shanghai	1921	Anarchist	0
## 116	Rome	1921	Leftist	0
## 117	Montreal	1922	Rightist	0
## 118	Dublin	1922	Nationalist	0
## 119	Osaka	1922	Anarchist	0
## 120	San Juan	1922	Nationalist	0
## 121	Barcelona	1922	Anarchist	0
## 122	.	1923	Leftist	0
## 123	Beijing	1923	Anarchist	0
## 124	Munich	1923	Rightist	0
## 125	Tokyo	1923	Anarchist	1
## 126	Shanghai	1924	Anarchist	0
## 127	Bellaire, Ohio	1924	Rightist	0
## 128	Tokyo	1924	Other	1
## 129	Buenos Aires	1925	Anarchist	0
## 130	.	1925	Leftist	0
## 131	Punjab	1926	Nationalist	0
## 132	Bucharest	1927	Rightist	1
## 133	Valencia	1927	Anarchist	0
## 134	Calcutta	1928	Nationalist	0
## 135	New Delhi	1928	Nationalist	0
## 136	Vienna	1929	Rightist	0
## 137	Safed	1929	Nationalist	0
## 138	Zagreb	1929	Rightist	0
## 139	Tokyo	1930	Rightist	1
## 140	Haifa	1930	Religious	0
## 141	Shanghai	1931	Anarchist	0
## 142	Shanghai	1931	Anarchist	0
## 143	Shanghai	1931	Anarchist	1
## 144	Shanghai	1931	Anarchist	0
## 145	Shanghai	1931	Anarchist	0
## 146	Shanghai	1931	Anarchist	1
## 147	Havana	1931	Leftist	0
## 148	Jerusalem	1931	Nationalist	0
## 149	Jerusalem	1931	Nationalist	0
## 150	Shanghai	1932	Rightist	1

## 151	Safed	1932	Religious	0
## 152	Tokyo	1932	Rightist	0
## 153	Kabul	1933	Other	1
## 154	Shanghai	1933	Anarchist	0
## 155	Cairo	1933	Nationalist	0
## 156	Madrid	1933	Rightist	0
## 157	Madrid	1934	Rightist	0
## 158	Tulkarm/Qalqilya	1935	Nationalist	0
## 159	Paris	1936	Rightist	0
## 160	Shanghai	1937	Nationalist	0
## 161	Shanghai	1937	Leftist	0
## 162	Shanghai	1938	Other	0
## 163	Shanghai	1938	Nationalist	0
## 164	Saint-Brieuc, Brittany	1938	Rightist	0
## 165	Paris	1940	Rightist	0
## 166	Jerusalem	1940	Nationalist	0
## 167	Johannesberg	1941	Rightist	0
## 168	.	1941	Other	0
## 169	Aceh*	1942	Religious	0
## 170	Vinius	1945	Other	1
## 171	Atlanta	1946	Rightist	0
## 172	Algiers	1947	Nationalist	0
## 173	Jerusalem	1950	Religious	0
## 174	Birmingham	1951	Rightist	0
## 175	.	1952	Nationalist	0
## 176	Hubei*	1952	Religious	1
## 177	Tunis	1952	Rightist	1
## 178	Santiago de Cuba	1953	Nationalist	0
## 179	Tel Aviv	1953	Other	0
## 180	Algiers	1954	Nationalist	1
## 181	Algiers	1954	Nationalist	0
## 182	Nicosia	1955	Nationalist	0
## 183	West Bengal*	1955	Religious	1
## 184	Birmingham	1955	Rightist	0
## 185	South Tyrol	1956	Nationalist	0
## 186	Milan	1957	Rightist	0
## 187	Cairo	1958	Nationalist	0
## 188	.	1959	Nationalist	0
## 189	Bilbao	1959	Nationalist	0
## 190	Miami	1959	Nationalist	0
## 191	Buenos Aires	1960	Leftist	0
## 192	Lisbon	1960	Leftist	0
## 193	Quebec*	1960	Nationalist	1
## 194	Alabama	1960	Rightist	0
## 195	.	1960	Leftist	0
## 196	Brasilia	1961	Leftist	0
## 197	Kigali	1961	Nationalist	0
## 198	Cairo	1961	Nationalist	0
## 199	Munich	1961	Rightist	0
## 200	.	1961	Other	1
## 201	Johannesberg	1961	Nationalist	0
## 202	Quebec	1962	Nationalist	0
## 203	Miami	1962	Other	0
## 204	Tokyo	1963	Leftist	0
## 205	Liverpool	1963	Nationalist	0
## 206	Brixham	1963	Other	1
## 207	Brittany*	1963	Nationalist	0
## 208	Narathiwat	1963	Nationalist	0
## 209	Cabinda*	1963	Nationalist	0
## 210	Melbourne	1963	Nationalist	0
## 211	Montevideo	1963	Leftist	0
## 212	Tizi-Ouzou	1963	Leftist	0
## 213	Montreal	1963	Nationalist	0
## 214	Algiers	1964	Nationalist	0
## 215	.	1964	Leftist	0
## 216	Marquetalia*	1964	Leftist	0
## 217	Beirut	1964	Nationalist	0
## 218	Vidalia, Louisiana	1964	Rightist	0
## 219	Mississippi*	1964	Rightist	0
## 220	.	1964	Leftist	0
## 221	West Papua*	1965	Nationalist	0
## 222	Damascus	1965	Other	1
## 223	.	1966	Nationalist	0
## 224	Cordillera*	1966	Leftist	0
## 225	.	1966	Rightist	0
## 226	Belfast	1966	Nationalist	0
## 227	Damascus	1968	Nationalist	0

```
## 228      .      1966 Nationalist      0
## 229      Damascus 1966 Nationalist      0
## 230      Oakland 1966 Leftist          0
## 231      New York City 1967 Nationalist      0
## 232      Concepcion 1967 Leftist          0
## 233      Mogadishu 1967 Nationalist      0
## 234      .      1967 Religious          0
## 235      Assam*    1967 Nationalist      0
## 236      .      1967 Nationalist      1
## 237      .      1967 Nationalist      0
## 238      Buenos Aires 1968 Leftist          0
## 239      Rio de Janeiro 1968 Leftist          0
## 240      Rio de Janeiro 1968 Leftist          0
## 241      Rio de Janeiro 1968 Leftist          0
## 242      .      1968 Leftist          0
## 243      Miami/New York City 1968 Leftist          0
## 244      Puerto Rico* 1968 Leftist          0
## 245      Paris      1968 Leftist          1
## 246      Paris      1968 Leftist          0
## 247      Frankfurt 1968 Leftist          0
## 248      Ramallah   1968 Nationalist      0
## 249      .      1968 Nationalist      0
## 250      Pattani*   1968 Nationalist      0
## 251      .      1968 Nationalist      0
## 252      London     1968 Leftist          0
## 253      Detroit    1968 Nationalist      0
## 254      New York City 1968 Anarchist      1
## 255      New York City 1968 Nationalist      0
## 256      .      1969 Leftist          0
## 257      West Bengal* 1969 Leftist          0
## 258      Buenos Aires 1969 Leftist          0
## 259      Genoa      1969 Leftist          0
## 260      Tokyo      1969 Leftist          0
## 261      Tokyo      1969 Leftist          1
## 262      Manila     1969 Leftist          0
## 263      Belfast    1969 Nationalist      0
## 264      Mindanao*   1969 Nationalist      0
## 265      San Diego   1969 Rightist         0
## 266      Ann Arbor   1969 Leftist          0
## 267      Caracas     1969 Leftist          0
## 268      Beirut     1969 Rightist         0
## 269      NA          NA
## 270      NA          NA
```

```
## Observations: 270
## Variables: 6
## $ Country <fct> USA, Russia, USA, USA, USA, Russia, China, USA, USA,...
## $ Group <fct> Molly Maguires, The Organization (Hell), Ku Klux Kla...
## $ City <fct> "Pennsylvania* ", "Moscow", "Pulaski", "New Orleans"...
## $ StrYear <int> 1862, 1864, 1865, 1865, 1867, 1869, 1870, 1873, 1874...
## $ Ideology <fct> Other, Anarchist, Rightist, Rightist, Rightist, Left...
## $ Ambiguous <int> 0, 0, 0, 0, 0, 0, 1, 0, 0, 1, 1, 1, 0, 0, 0, 0, 1, 0...
```

Mutate() and vetting my data:

Here, I went ahead and deselected certain variables based on relevance, convenience, and clarity. I also used the Mutate() function to create a 'Date' variable based on the provided time data using library(lubridate) - very cool.

Merging Datasets:

Because I identified the 'Ambiguity' variable from the smaller, more straightword data as my point of interest, I performed a right join using this dataset as the RHS to preserve an Ambiguity datapoint in all rows. However, the caveat was that I lost a lot of data when I accounted for duplicates.

```
##Merging Datasets!
```

```
right_join(comp_trrGTD, terrorG_1, by = "Country") %>% distinct(Country, .keep_all= TRUE) -> joinedTerrors
```

```
## Warning: Column `Country` joining factors with different levels, coercing
## to character vector
```

```
##Nondistinct data kept
```

```
right_join(comp_trrGTD, terrorG_1, by = "Country") -> joinedTerrorsFULL
```

```
## Warning: Column `Country` joining factors with different levels, coercing
## to character vector
```

Reshaping:

I decided to reshape my data after I had merged them. I ran a really simple untidy task which worked well. However, when I attempted to retidy, I was met with the error below. To my understanding, it is saying that R doesn't know how to place each observation due to duplicate values.

```
#reshaping ---> untidy dataset

joinedTerrors %>% pivot_longer(cols=c("Country", "Group"), names_to = "Vars", values_to = "AllInfo") -> newUntidyJoined

#retidying
newUntidyJoined %>% pivot_wider(names_from = "Vars", values_from = "AllInfo")
```

```
## Warning: Values in `AllInfo` are not uniquely identified; output will contain list-cols.
## * Use `values_fn = list(AllInfo = list)` to suppress this warning.
## * Use `values_fn = list(AllInfo = length)` to identify where the duplicates arise
## * Use `values_fn = list(AllInfo = summary_fun)` to summarise duplicates
```

```
## # A tibble: 69 x 12
##   Date          year month  day city  AttackType City  StrYear
##   <dtm>          <int> <int> <int> <fct> <fct>    <fct>    <int>
## 1 NA              NA    NA    NA <NA>  <NA>      "Pen~    1862
## 2 2003-03-21 00:00:00 2003    3    21 Mesk~ Bombing/E~ Mosc~    1864
## 3 NA              NA    NA    NA <NA>  <NA>      Huna~    1870
## 4 2011-12-02 00:00:00 2011   12    2 Kali~ Facility/~ Decc~    1875
## 5 NA              NA    NA    NA <NA>  <NA>      Paris    1880
## 6 NA              NA    NA    NA <NA>  <NA>      New ~    1881
## 7 NA              NA    NA    NA <NA>  <NA>      "Tok~    1881
## 8 NA              NA    NA    NA <NA>  <NA>      Dubl~    1881
## 9 NA              NA    NA    NA <NA>  <NA>      Wars~    1882
## 10 1987-07-06 00:00:00 1987    7    6 Dura~ Bombing/E~ Anda~    1882
## # ... with 59 more rows, and 4 more variables: Ideology <fct>,
## #   Ambiguous <int>, Country <list<chr>>, Group <list<chr>>
```

Reshaping continued:

Upon further investigation of the original merged dataset, I found the likely culprits. After untidying, two observations became identical. Additionally, the data that was untidied both contained a common string of characters ("Palestein"). This is my hypothesis on why R was unable to reshape the data how I wanted.

```
## # A tibble: 2 x 12
## # Groups:   City [1]
##   Date          year month  day city  AttackType City  StrYear
##   <dtm>          <int> <int> <int> <fct> <fct>    <fct>    <int>
## 1 NA              NA    NA    NA <NA>  <NA>      Beir~    1964
## 2 NA              NA    NA    NA <NA>  <NA>      Beir~    1964
## # ... with 4 more variables: Ideology <fct>, Ambiguous <int>, Vars <chr>,
## #   AllInfo <chr>
```

```
## Warning: Values in `AllInfo` are not uniquely identified; output will contain list-cols.
## * Use `values_fn = list(AllInfo = list)` to suppress this warning.
## * Use `values_fn = list(AllInfo = length)` to identify where the duplicates arise
## * Use `values_fn = list(AllInfo = summary_fun)` to summarise duplicates
```

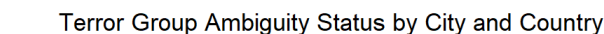
```
## # A tibble: 68 x 12
##   Date          year month  day city  AttackType City  StrYear
##   <dtm>          <int> <int> <int> <fct> <fct>    <fct>    <int>
## 1 NA              NA    NA    NA <NA>  <NA>      "Pen~    1862
## 2 2003-03-21 00:00:00 2003    3    21 Mesk~ Bombing/E~ Mosc~    1864
## 3 NA              NA    NA    NA <NA>  <NA>      Huna~    1870
## 4 2011-12-02 00:00:00 2011   12    2 Kali~ Facility/~ Decc~    1875
## 5 NA              NA    NA    NA <NA>  <NA>      Paris    1880
## 6 NA              NA    NA    NA <NA>  <NA>      New ~    1881
## 7 NA              NA    NA    NA <NA>  <NA>      "Tok~    1881
## 8 NA              NA    NA    NA <NA>  <NA>      Dubl~    1881
## 9 NA              NA    NA    NA <NA>  <NA>      Wars~    1882
## 10 1987-07-06 00:00:00 1987    7    6 Dura~ Bombing/E~ Anda~    1882
## # ... with 58 more rows, and 4 more variables: Ideology <fct>,
## #   Ambiguous <int>, Country <list<chr>>, Group <list<chr>>
```

I tested my theory and it did not work! Which means there were other duplicates causing the problem. I looked further and couldn't figure out which ones they were to much dismay.

Because I excluded all duplicates and was left with a very limited dataset, I reverted back to the original merged dataset for summary statistics. In the interest of time and of attempting to convey data on Ambiguous terror groups, I generated two bar plots with ggplot.

The second plot - the faceted geombar plot - represented this data in a slightly different way. This plot was grouped by both City and Country so each facet represents the proportion of these mysterious terror groups per per country with a bar for every listed city listed. countries with more bars have more terror groups overall. However, the color of the bars must also be noted. Proportionality of ambiguous terror groups is represented by a color gradient where light blue bars indicate a completely ambiguous terror group presence. Dark bars represent little to no presence of these type of groups.

This plot provides a visual for comparing the proportion of Ambiguous-stated terror groups between



A visual plot to note the count of terror groups and ambiguity status per country



```
## Warning: Factor `AttackType` contains implicit NA, consider using
## `forcats::fct_explicit_na`
```

```
## # A tibble: 7 x 5
```

AttackType	PropAmbig	sdAmbig	n	seAmbig
<fct>	<dbl>	<dbl>	<int>	<dbl>
1 Armed Assault	0.125	0.338	24	0.0690
2 Assassination	0.0714	0.267	14	0.0714
3 Bombing/Explosion	0.14	0.349	100	0.0349
4 Facility/Infrastructure Attack	0.148	0.362	27	0.0697
5 Hostage Taking (Kidnapping)	0.161	0.374	31	0.0672
6 Unknown	1	NA	1	NA
7 <NA>	0.182	0.387	172	0.0295