**THEORY BEHIND PROBLEM STATEMENT**

**GTD Definition of Terrorism and Inclusion Criteria**

The GTD defines a terrorist attack as *the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation*.

In practice this means that, in order to consider an incident for inclusion in the GTD, *all three* of the following attributes must be present:

 ***The incident must be intentional*** – the result of a conscious calculation on the part of a perpetrator.

 ***The incident must entail some level of violence or immediate threat of violence*** -including property violence, as well as violence against people.

 ***The perpetrators of the incidents must be sub-national actors.*** The database does not include acts of state terrorism.

In addition, *at least two* of the following three criteria must be present for an incident to be included in the GTD:

 **Criterion 1: The act must be aimed at attaining a political, economic, religious, or social goal**. In terms of economic goals, the exclusive pursuit of profit does not satisfy this criterion. It must involve the pursuit of more profound, systemic economic change.

 **Criterion 2*:* There must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims**. It is the act taken as a totality that is considered, irrespective if every individual involved in carrying out the act was aware of this intention. As long as any of the planners or decision-makers behind the attack intended to coerce, intimidate or publicize, the intentionality criterion is met.

 **Criterion 3: The action must be outside the context of legitimate warfare activities**. That is, the act must be outside the parameters permitted by international humanitarian law, insofar as it targets non-combatants

**Filtering Mechanism: “Doubt Terrorism Proper?”**

* The inclusion criteria above are evaluated for each case to determine if it should be added to the GTD;
* However, there is often definitional overlap between terrorism and other forms of crime and political violence (such as insurgency, hate crime, and organized crime).
* Likewise, for many cases there is insufficient or conflicting information provided in source documents to allow coders to make a clear determination regarding whether or not the inclusion criteria are met.

**Such DEFINITION OVERLAP or UNCERTAINITY, however, was not deemed to be sufficient to disqualify the incident from inclusion in the GTD.**

**PROBLEM STATEMENT**

* **HIERARCHIAL CLASSIFICATION PROBLEM**
* **It’s not a prediction problem**
* **It’s an investigation problem**

**LEVEL-1:**

**To classify the form of a crime activity occurred into an act of terrorism or not.**

**LEVEL-2:**

**If not, further drilling down the classification to investigate the designation of non-terrorist activity**

The “Doubt Terrorism Proper” column contains data that the incident in question is *exclusively* terrorism or not.

If not, then the act conforms to one of five possible alternative designations:

1) Insurgency/Guerilla Action

2) Other Crime Type

3) Intra/Inter-group conflict

4) Lack of Intentionality

5) State Actor

CORRESPONDING COLUMNS REPRESENTATING THE PROBLEM STATEMENT

**Incident Summary**

* *(summary)*
* T*ext Variable*

A brief narrative summary of the incident, noting the “when, where, who, what, how, and why.”

Note: This field is presently only systematically available with incidents occurring after 1997.

**Inclusion Criteria**

* *(crit1, crit2, crit3)*
* *Categorical Variables*

Criterion 1: POLITICAL, ECONOMIC, RELIGIOUS, OR SOCIAL GOAL *(CRIT1)*

* The violent act must be aimed at attaining a political, economic, religious, or social goal.
* This criterion is not satisfied in those cases where the perpetrator(s) acted out of a pure profit motive or from an idiosyncratic personal motive unconnected with broader societal change.

1 = "Yes" The incident meets Criterion 1.

0 = "No" The incident does not meet Criterion 1 or there is no indication that the incident meets Criterion 1.

Criterion 2: INTENTION TO COERCE, INTIMIDATE OR PUBLICIZE TO LARGER AUDIENCE(S) *(CRIT2)*

* To satisfy this criterion there must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims.
* Such evidence can include (but is not limited to) the following: pre- or post-attack statements by the perpetrator(s), past behavior by the perpetrators, or the particular nature of the target/victim, weapon, or attack type.

1 = "Yes" The incident meets Criterion 2.

0 = "No" The incident does not meet Criterion 2 or no indication.

Criterion 3: OUTSIDE INTERNATIONAL HUMANITARIAN LAW *(CRIT3)*

* The action is outside the context of legitimate warfare activities, insofar as it targets non-combatants (i.e. the act must be outside the parameters permitted by international humanitarian law).

1 = "Yes" The incident meets Criterion 3.

0 = "No" The incident does not meet Criterion 3.

**TARGET COLUMN: Doubt Terrorism Proper**

* *(doubtterr)*
* *Categorical Variable*
* In certain cases, there may be some uncertainty whether an incident meets all of the criteria for inclusion.
* In these ambiguous cases, where there is a strong possibility, but not certainty, that an incident represents an act of terrorism, the incident is included in GTD and is coded as “Yes” for this variable.

1 = "Yes" There is doubt as to whether the incident is an act of terrorism.

0 = "No" There is essentially no doubt as to whether the incident is an act of terrorism.

Note: This field is presently only systematically available with incidents occurring after 1997. If this variable was not included in the data collection process at the time the case was coded, “-9” is recorded in the database.

**Alternative Designation**

* *(alternative; alternative\_txt)*
* *Categorical Variable*

1= Insurgency/Guerilla Action

2= Other Crime Type

3= Inter/Intra-Group Conflict

4= Lack of Intentionality

5= State Actors (systematically coded post-2012)

Note: This field is presently only systematically available with incidents occurring after 1997.

COMPLEXITY INVOLVED:

* The size of the dataset is relatively large, thereby leading to high processing time during our project work
* The terminologies involved are domain specific. So, familiarising ourselves with the meaning of the feature\_cols & general awareness was time taking
* Since the data involves a lot of pre-processing & Data cleaning, we couldn’t directly start with Tableau visualisations

PROJECT OUTCOME:

# Commercial, Academic or Social value ?

ACADEMIC VALUE:

To help the terrorism research department at the John Hopkins University with our contribution towards GTD analysis & visualisations

SOCIAL VALUE:

To help the investigation process regards to a crime activity by firstly classifying the form of crime occurred.

To help the START which hosts the GTD dataset, with the inclusion of only those exclusively terrorist activities into the dataset.

\*National Consortium for the Study of Terrorism and Responses to Terrorism (November 2011-present)