PS-643: Introduction to AI, Data and Policy

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Human rights and Word Embeddings

What is Human rights?

Human rights are more concrete and standard than ethics. Unconditional rights afforded to all humans irrespective of birth, nationality or ethnic origin, color.

- 1. **Right to Life**: Mere survival to encompass a dignified life. The interpretation of what constitutes a "dignified life" can vary between countries and cultures
- 2. **Right to Belief** This right is often limited by societal and governmental constraints in many parts of the world.
- Broader ethics not actionable, human rights are actionable have legal instrument to enforce

How Human rights have been defined?

Right to free news: Once considered a human right, this concept was challenged when India
pointed out that major news agencies were predominantly based in Western countries,
particularly the United States.

Human rights are categorized as

- **Negative rights:** Nothing new is provided, existent condition is protected. These are rights that require others (usually the government) to refrain from certain actions.
 - o e.g: Right to free speech, Right to dignity, Right to Life
- Positive rights: Also known as welfare rights, these require active provision by the state.
 - e.g: Right to education, Right to food, Right to healthcare

Critiques of Human rights

- The universality of certain rights (e.g., free speech) is debated in countries.
- Positive rights can sometimes disproportionately benefit wealthier individuals who are better positioned to take advantage of them.
- Should Policy vacination be human rights? Yes

Structural Violence

- A form of violence wherein social structures or social institutions may harm people by preventing them from meeting their basic needs. When you are facing violence because of system e.g (caste, religion, gender, race). Human rights post-World War II often didnot adequately address this concept.
- Constitutional Morality: In some countries, like Germany, the concept of "Basic Law" (Grundgesetz) replaces traditional constitutions, emphasizing society's role in providing and protecting rights.

History of Human Rights

- 1. **Magna Carta (1215)**: A charter of rights agreed to by King John of England. It established that everyone, including the king, was subject to the law and protected certain rights of the king's subjects, mainly the wealthy.
- 2. **Age of Enlightenment**: Ideas about individual rights and liberties. Notable philosopher included John Locke, Jean-Jacques Rousseau, and Immanuel Kant
- 3. **Universal Declaration of Human Rights (1948)**: Adopted by the United Nations after World War II. Basic rights and freedoms to which all humans are entitled.
- 4. **Right Against Refoulement (1951):** It prohibits countries from returning refugees or asylum seekers to countries where they face danger
- 5. International Covenants (1966): International Covenant on Civil and Political Rights (ICCPR), International Covenant on Economic, Social and Cultural Rights (ICESCR)

Limitations of Human rights as Governing Mechanism

• Does not consider social and financial rights. e.g, Al can take away jobs because *right to job* is not Human right

Word Embeddings

- Word embeddings are a way to represent words as numbers that computers can understand.
 Words with similar meanings are placed closer together in a mathematical space.
- Each word is turned into a list of numbers called a vector.
- Words are converted into vectors, where each word represented is meaningfully close as well as spatially close. For eg, I want dog to be meaningful close to cat
 - o cat [001]
 - o bat [010]
 - o hat [100]

- o dog [101]
- The closeness between words is often measured using Euclidean distance or other similar methods. Words with smaller distances between their vectors are considered more similar in meaning.
- 2 Algorithm for Word embeddings: Continuous Bag of Words (CBOW) and Skip-gram
 - CBOW predicts a word based on its nearest context words.
 - o Skip-gram does the opposite: it predicts the context words given a target word
- Word2Vec and GloVe are two well-known models for creating word embeddings.
 - Word2Vec uses neural networks to learn word associations from a large corpus of text.
 - GloVe (Global Vectors for Word Representation) uses statistical methods to capture word relationships.