Exemple Class extracted from the text:

Geographical Space

- Total Area: Numeric (e.g., 17,098,242 km² for Russia)
- Population Density: Numeric (e.g., 9 people/km² for Canada)
- Climate Type: Categorical (e.g., Temperate, Tropical, Continental)
- **Topography**: Text (e.g., "Mountainous terrain with vast plains")
- Natural Hazards: List (e.g., [Earthquakes, Tsunamis])
- **Resources**: List (e.g., [Oil, Gas, Timber])
- Biodiversity Level: Categorical (e.g., High, Medium, Low)
- Accessibility: Text (e.g., "Limited in remote areas")
- Strategic Importance Level: Categorical (e.g., High, Low)
- Bordering Countries: List (e.g., [China, India, Mongolia for Russia])
- Major Rivers and Water Bodies: List (e.g., [Volga River, Caspian Sea])

Country

- Name: Text (e.g., Russia)
- Capital: Text (e.g., Moscow)
- Population: Numeric (e.g., 144 million)
- Official Language: Text (e.g., Russian)
- **Currency**: Text (e.g., Ruble)
- Region: Text (e.g., Eastern Europe, Asia)
- Government Type: Text (e.g., Federal Republic)

Natural Barriers

- Barrier Type: Categorical (e.g., Mountain, Ocean, River)
- Name: Text (e.g., Himalayas)
- **Impact**: Text (e.g., "Impacts trade, cultural exchange")
- Length/Extent: Numeric (e.g., 2,400 km for the Himalayas)

Climate

- **Type**: Categorical (e.g., Tropical, Temperate, Continental)
- Temperature Range: Numeric (e.g., -40°C to 30°C)
- **Precipitation**: Numeric (e.g., 500 mm annually)
- Seasonal Variability: Categorical (e.g., Monsoonal, Dry)

Topography

- **Terrain Type**: Categorical (e.g., Mountainous, Plain)
- Elevation Range: Numeric (e.g., Sea level to 8,848 m for Mount Everest)
- **Notable Features**: Text (e.g., "Himalayan mountains, plateaus")

Natural Hazards

- **Type**: Categorical (e.g., Earthquake, Tsunami, Flood)
- **Severity**: Numeric (e.g., Richter Scale for earthquakes)
- **Frequency**: Numeric (e.g., Occurs every 10 years)

Resources

- **Resource Type**: Categorical (e.g., Mineral, Oil, Timber)
- **Abundance**: Numeric (e.g., 100 billion barrels for oil)
- Exploitation Status: Categorical (e.g., Fully Exploited, Untapped)

Strategic Importance

- Importance Level: Categorical (e.g., High, Low)
- Military Presence: Numeric (e.g., 50 military bases)
- **Political Influence**: Categorical (e.g., Major Power)

Accessibility

- Transport Infrastructure: Categorical (e.g., Roads, Rail, Air)
- Accessibility Issues: Text (e.g., "Mountainous terrain")
- Connectivity with Neighboring Regions: Text (e.g., "Limited due to mountainous regions")

Rivers and Water Bodies

- **River Type**: Categorical (e.g., River, Lake, Sea)
- Length/Area: Numeric (e.g., 4,400 km for the Amazon River)
- Water Quality: Categorical (e.g., Clean, Polluted)

Economic Indicators

• **GDP**: Numeric (e.g., \$1.7 trillion)

- GDP per Capita: Numeric (e.g., \$12,000)
- Inflation Rate: Numeric (e.g., 3.5%)
- Unemployment Rate: Numeric (e.g., 5.2%)
- Major Industries: List (e.g., [Manufacturing, Services, Technology])
- Trade Balance: Numeric (e.g., \$100 billion surplus)
- Foreign Direct Investment (FDI): Numeric (e.g., \$50 billion)
- **Public Debt**: Numeric (e.g., 60% of GDP)
- **Economic Growth Rate**: Numeric (e.g., 2.7% annually)

Political Structure

- **Government Type**: Categorical (e.g., Democracy, Autocracy, Federal Republic)
- **Political Stability**: Categorical (e.g., Stable, Unstable, Transitional)
- Major Political Parties: List (e.g., [United Russia, Servant of the People])
- International Memberships: List (e.g., [UN, NATO, WTO])
- Legal System: Text (e.g., Common Law, Civil Law, Sharia Law)
- Corruption Index: Numeric (e.g., Transparency International score of 45)
- **Judicial Independence**: Categorical (e.g., Independent, Influenced by Government)

Social Factors

- Literacy Rate: Numeric (% e.g., 99%)
- Life Expectancy: Numeric (years, e.g., 72 years)
- Ethnic Composition: List (e.g., [Russians, Ukrainians, Tatars])
- **Religion**: List (e.g., [Orthodox Christianity, Islam, Judaism])
- Education System: Text (e.g., "Compulsory education until 16")
- Healthcare System: Text (e.g., "Universal healthcare, Private healthcare")
- **Population Growth Rate**: Numeric (e.g., 1.2% annually)

EXEMPLE IN KG:

Entities

1. Country

Name: "Russia"Capital: "Moscow"Population: 144 million

- Official Language: "Russian"
- o Currency: "Ruble"
- o Region: "Eastern Europe, Asia"
- o Government Type: "Federal Republic"

2. Ukraine

Name: UkraineCapital: Kyiv

• **Population**: 41 million

• Official Language: Ukrainian

• Currency: Hryvnia

Region: Eastern EuropeGovernment Type: Unitary

Relationship

• Relationship Name: SharesBorderWith

Properties of the Relationship

NO PROPERTIES

This would translate into a knowledge graph:

- Node 1 (Country):
 - o Name: Russia
 - Attributes: Total Area, Population Density, Climate Type, Resources, Biodiversity Level
- Node 2 (Country):
 - o Name: Ukraine
 - Attributes: Capital, Population, Official Language, Currency, Region, Government Type
- Edge (Relationship):
 - Name: SharesBorderWith

Geographical Space:

Eurasian Flatlands

- Total area: Approximately 10,000,000 km² (estimate).
- Population density: Low to medium (varies by subregion).
- Major rivers and water bodies: Dnieper River, Volga River, Ural River.

Rimland

- Total area: Approximately 20,000,000 km² (spanning multiple countries).
- Population density: Medium to high in urban centers.
- Major rivers and water bodies: Pacific Ocean, South China Sea, Indian Ocean.

Intermarium Corridor

- Total area: Approximately 500,000 km² (estimate).
- Population density: Medium.
- Major rivers and water bodies: Vistula River, Baltic Sea.

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Carpathian Mountains

- **Total area**: Approximately 200,000 km² (range).
- Population density: Low (sparsely populated).
- Major rivers and water bodies: Tisza River.

Caucasus

- Total area: Approximately 440,000 km² (estimate).
- Population density: Low to medium.
- Major rivers and water bodies: Kura River, Caspian Sea.

Black Sea

- Total area: 436,402 km².
- **Population density**: N/A (water body).
- Major rivers and water bodies: Dnieper River (tributary).

Caspian Sea

- Total area: 371,000 km².
- Population density: N/A (water body).
- Major rivers and water bodies: Volga River.

Europe

Countries:

1. Russia

Name: RussiaCapital: Moscow

Population: 144 millionOfficial Language: Russian

• Currency: Ruble

Region: Eastern Europe, AsiaGovernment Type: Federal

2. Canada

Name: CanadaCapital: Ottawa

• **Population**: 38 million

• Official Language: English, French

Currency: Canadian DollarRegion: North America

• **Government Type**: Federal Parliamentary

3. China

Name: ChinaCapital: Beijing

• **Population**: 1.4 billion

Official Language: MandarinCurrency: Renminbi (Yuan)

• **Region**: East Asia

• Government Type: Socialist Republic

4. India

• Name: India

Capital: New DelhiPopulation: 1.4 billion

• Official Language: Hindi, English

• Currency: Indian Rupee

• **Region**: South Asia

• **Government Type**: Federal Parliamentary

5. Ukraine

Name: UkraineCapital: Kyiv

• **Population**: 41 million

• Official Language: Ukrainian

• **Currency**: Hryvnia

Region: Eastern EuropeGovernment Type: Unitary

Natural Barriers:

1. Himalayas

• Barrier Type: Mountain

• Name: Himalayas

• Impact: Impacts trade, cultural exchange

• Length/Extent: 2,400 km

2. Pacific Ocean

Barrier Type: OceanName: Pacific Ocean

• Impact: Acts as a natural defense and influences climate

• Length/Extent: Not specified

3. Sahara Desert

Barrier Type: DesertName: Sahara Desert

Impact: Hinders movement and trade across North Africa

• Length/Extent: 9.2 million km²

4. Amazon River

Barrier Type: RiverName: Amazon River

Impact: Affects regional accessibility and ecosystems

• Length/Extent: 6,575 km

5. Rocky Mountains

Barrier Type: MountainName: Rocky Mountains

• Impact: Impacts travel and trade routes in North America

• Length/Extent: 4,800 km

6. Andes Mountains

Barrier Type: MountainName: Andes Mountains

• Impact: Defines regional geography and climate in South America

• Length/Extent: 7,000 km

7. Atlantic Ocean

Barrier Type: OceanName: Atlantic Ocean

• Impact: Facilitates and hinders transatlantic trade and migration

• Length/Extent: Not specified

Climate:

1. Tropical

• Type: Tropical

• Seasonal Variability: Monsoonal

2. Temperate

• Type: Temperate

• Seasonal Variability: Distinct seasons

3. Continental

• Type: Continental

• Seasonal Variability: Dry winters, warm summers

topology:

1. Mountainous

• Elevation Range: 0 m to 8,848 m (Mount Everest)

• Notable Features: "Himalayan mountains, plateaus"

2. Plain

• Elevation Range: 0 m to 1,000 m

• Notable Features: "Vast plains"

Natural Hazard:

Earthquake

• Type: Earthquake

Severity: Not specified in the textFrequency: Not specified in the text

Tsunami

• Type: Tsunami

Severity: Not specified in the textFrequency: Not specified in the text

Resources:

- 1. Oil
- Resource type: Oil
- 2. Gas
 - Resource type: Gas
- 3. Timber
 - o Resource type: Timber

Strategic importance:

- 1. High
- 2. low

Accessibility:

1. Accessibility

Economic indicators:

- 1. GDP
- 2. Major Industries
- 3. Economic Growth Rate

Political Structure

- Government Type
- PoliticalStability
- MajorPoliticalParties
- InternationalMemberships
- LegalSystem
- CorruptionIndex
- JudicialIndependence

Infrastructure:

- TransportInfrastructure
- EnergyInfrastructure
- CommunicationInfrastructure
- UrbanizationRate
- AccesstoCleanWater
- ElectricityAccess

Military:

1. Russian Armed Forces:

• Military Expenditure: ~\$65 billion

- Military Bases: Numerous domestic and occupied bases
- Military Alliances: CSTO, SCO
- Defense Systems: S-400 missile defense
- Active-duty Personnel: ~1 million
- Reserve Forces: ~2 million
- Nuclear Arsenal: ~6,375 warheads

2. Ukrainian Armed Forces:

- Military Expenditure: ~\$5-6 billion
- Military Bases: Various bases, especially in conflict zones
- Military Alliances: NATO Partnership
- Defense Systems: S-300, Buk missile systems
- Active-duty Personnel: ~250,000
- Reserve Forces: ~80,000
- Nuclear Arsenal: None

3. Ukrainian National Guard:

- Military Expenditure: Part of Ukraine's overall budget
- Military Bases: Operates in urban and conflict areas
- Military Alliances: Aligns with NATO-supported forces
- Defense Systems: Shares defense systems with the military
- Active-duty Personnel: ~60,000
- Reserve Forces: Additional mobilization available
- Nuclear Arsenal: None

4. Russian Ministry of Defence:

- Military Expenditure: Part of Russia's overall military budget
- Military Bases: Oversees numerous bases
- Military Alliances: CSTO, SCO
- Defense Systems: Manages missile defense systems
- Active-duty Personnel: ~1 million
- Reserve Forces: ~2 million
- Nuclear Arsenal: ~6,375 warheads

International relationship:

International Relation

Environmental Factors:

- Protected Areas
- Pollution Levels
- Climate Change Impact
- Natural Resource Management
- Biodiversity

Demographic:

Demographic

Technology:

Technology

Historical Context

- Colonial History
- Major Conflicts
- Historical Treaties
- Historical Alliances

Economic policies:

- tradePolicies
- monetaryPolicies
- fiscalPolicies
- economicReforms
- subsidiesAndGrants

cultural factors:

- Language Diversity
- Cultural Heritage
- National Identity
- Cultural Institutions
- Festivals and Traditions

Legal frameworks:

- HumanRightsRecord: Categorical (e.g., Good, Poor)
- JudicialSystem: Text (e.g., Independence, Government-controlled)
- LawEnforcementAgencies: List (e.g., FSB, SBU)
- IntellectualPropertyLaws: Text (e.g., Strong protection, Weak enforcement)
- RegulatoryEnvironment: Text (e.g., Business-friendly, Bureaucratic)

Geographical Space

- 1. Eurasian Flatlands → IsPartOf → Rimland
 - Property: Role: Primary Terrain.
- 2. Intermarium Corridor \rightarrow LiesWithin \rightarrow Eurasian Flatlands
 - o Property: Significance: Strategic Buffer Zone.
- 3. Carpathian Mountains \rightarrow SharesBorderWith \rightarrow Ukraine
 - Property: Function: Natural Barrier; Use: Defense Line.
- 4. Caucasus → Separates → Russia/Black Sea
- 5. Black Sea → ConnectsTo → Caspian Sea
 - Property: Connection: Waterways.
- 6. Rimland \rightarrow Encircles \rightarrow Eurasian Flatlands
 - o Property: Function: Strategic Perimeter.

Countries

- 1. Russia → SharesBorderWith → Ukraine
- 2. Canada → IsNeighborOf → USA
 - o Property: Trade Relationship: Strong.
- 3. China \rightarrow SharesBorderWith \rightarrow India
 - Property: Conflict Zone: Himalayas.
- 4. India → MaintainsTradeWith → Russia
 - Property: Focus: Energy.
- 5. Ukraine \rightarrow IsPartOf \rightarrow Intermarium Corridor
- 6. Ukrain →IsIn →Europe

Natural Barriers

- 1. Himalayas → Separate → India/ China
- 2. Pacific Ocean → SharesBorderWith → Russia
- 3. Atlantic Ocean → ConnectsTo → Europe
 - Property: Function: Trade Route.

Climate

- 1. Russia → HasClimateType → Continental
 - Property: Temperature Range: Extreme Winters.
- 2. India \rightarrow HasClimateType \rightarrow Tropical
 - o Property: Monsoon: Heavy Seasonal Rains.
- 3. Canada \rightarrow HasClimateType \rightarrow Temperate

Property: Northern Areas: Subarctic.

Topology

- 1. Ukraine → ConsistsOf → Plain
- 2. Russia → Includes → Mountainous

Natural Hazards

- 1. Himalayas \rightarrow AreProneTo \rightarrow Earthquake
- 2. Pacific Ocean → Causes → Tsunami

Resources

- 1. Russia → Exports → Oil
 - o Property: Region: Siberia.
- 2. Canada \rightarrow Supplies \rightarrow Timber
 - Property: Focus: Sustainable Forestry.
- 3. Ukraine \rightarrow Possesses \rightarrow Gas
 - Property: Location: Eastern Reserves.

Strategic Importance

- 1. Intermarium Corridor → HasStrategicImportance → High
 - o Property: Function: Defense Buffer.
- 2. Carpathian Mountains \rightarrow HaveStrategicImportance \rightarrow Low
 - o Property: Use: Limited to Border Protection.

Accessibility

- 1. Ukraine \rightarrow HasLimited \rightarrow Accessibility
 - Property: Cause: Ongoing Conflict.
- 2. Russia → FacesChallengesIn → Accessibility
 - o Property: Reason: Harsh Winters.

Economic Indicators

1. China \rightarrow HasHigh \rightarrow GDP

- Property: Rank: Second Globally.
- 2. India → FocusesOn → Major Industries
 - Property: Example: Technology.
- 3. Ukraine \rightarrow HasFluctuating \rightarrow Economic Growth Rate
 - o Property: Cause: Conflict.

Political Structure

- 1. Canada → BelongsTo → International Memberships
 - Property: Example: G7.
- 2. Ukraine → AspiresToJoin → International Memberships
 - Property: Goal: EU and NATO.

Infrastructure

- 1. India → Develops → Transport Infrastructure
 - o Property: Type: High-Speed Rail.
- 2. Russia → Expands → Energy Infrastructure
 - o Property: Resource: Gas Pipelines.
- 3. Ukraine \rightarrow LacksDevelopmentIn \rightarrow Communication Infrastructure
 - o Property: Area: Rural Regions.

Military

- 1. Russian Ministry of Defence \rightarrow Commands \rightarrow Russian Armed Forces
 - Property: Objective: National Security.
- 2. Ukraine \rightarrow Maintains \rightarrow Ukrainian National Guard
 - Property: Role: Crisis Management.

International Relationships

- 1. Russia → HasTensionsWith → Ukraine
 - o Property: Cause: Territorial Disputes.
- 2. Canada → Supports → Ukraine
 - o Property: Type: Humanitarian Aid.

Environmental Factors

1. Canada → Manages → Natural Resource Management

- Property: Focus: Forestry.
- 2. China → FacesChallengesIn → Pollution Levels
 - o Property: Source: Industrial Activity.

Demographics

- 1. Russia \rightarrow FacesDeclineIn \rightarrow Demographic
 - Property: Cause: Aging Population.

Technology

- 1. India → Develops → Technology
 - Property: Sector: Software Development.

Historical Context

- 1. Ukraine → HasHistoricalConflictWith → Russia
 - Property: Example: Crimean Dispute.

Cultural Factors

- 1. India → Celebrates → Festivals and Traditions
 - o Property: Example: Diwali.

Legal Frameworks

- 1. Canada \rightarrow Upholds \rightarrow Human Rights Record
 - Property: Rating: Strong.