**SPAN ANNOTATIONS**

**General Event:** 728

**Specialized Event:** 861

**Time:** 270

**Total**: 1859

**General Event**

**Pos:** Counter({'Noun': 361, 'Verb': 335, 'Adjective': 31, None: 1})

**Polarity:** Counter({'Pos': 706, 'Neg': 22})

**Class:** Counter({None: 373, 'Occurrence': 166, 'State': 145, 'I\_Action': 30, 'Reporting': 11, 'Perception': 2, 'I\_State': 1})

**EventType:** Counter({None: 373, 'Transition': 165, 'State': 145, 'Process': 45})

**Tense:** Counter({None: 436, 'Past': 226, 'Present': 64, 'Future': 2})

**Aspect:** Counter({None: 562, 'Perfective': 152, 'Imperfective': 8, 'Progressive': 6})

**VForm:** Counter({None: 586, 'Participle': 76, 'Infinitive': 46, 'Gerundive': 20})

**Mood:** Counter({None: 725, 'Future': 2, 'Subjunctive': 1})

**Modality:** Counter({None: 721, 'Poder': 6, 'Dever': 1})

**Values:** Counter({None: 728})

**Observations:** Counter({None: 728})

**Specialized Event**

**Specialized Event Types:** Counter({

         'Personal History': 103,

         'Sign or Symptom': 83,

         'Examination': 99,

         'Examination Result': 133,

         'Treatment': 167,

         'Treatment Response': 51,

         'Medical Procedure': 14,

         'Principal Diagnosis': 66,

         'Characterization of the Disease': 82,

         'Drug Administration Route': 7,

         'Intercurrence': 56})

**Pos Specialized:** Counter({'Noun': 807, 'Adjective': 38, 'Pronoun': 11, 'Verb': 2, 'Other': 2, 'Preposition': 1})

**Polarity Specialized:** Counter({'Pos': 836, 'Neg': 25})

**Value Specialized:** Counter({None: 847,

         'Leucemia Mieloide Aguda': 1,

         'Remissão Parcial': 1,

         'Síndromes Mielodisplásicas': 1,

         'endovenoso': 1,

         'Diabetes Mellitus não insulino-tratado': 1,

         'Hipertensão Arterial': 2,

         'Asma Hipertensiva Corticodependente': 1,

         'Acidente Vascular Cerebral': 1,

         'Síndrome Mielodisplásico': 1,

         'quimioterapia': 1,

         'Fração de Ejeção do Ventrículo Esquerdo': 1,

         'Linfoma Não Hodgkin': 1,

         'suporte transfusional': 1})

**Times:**

**Time Type:** Counter({'Date': 206, 'Duration': 46, 'Time': 14, 'Set': 4})

**Temporal Function:** Counter({None: 213, 'DOCTIME': 18, 'DischargeTime': 16, 'AdmissionTime': 16, 'AnchorTime': 7})

**Value Time:** …

**RELATION ANNOTATIONS**

**TLINK (dataset):**Counter({'TLINK\_simultaneous': 733,

         'TLINK\_isIncluded': 286,

         'TLINK\_after': 337,

         'TLINK\_before\_overlap': 30,

         'TLINK\_endedBy': 5,

         'TLINK\_identity': 345,

         'TLINK\_begunBy': 37,

         'TLINK\_before': 155,

         'TLINK\_overlap\_after': 36,

         'TLINK\_includes': 115,

         'TLINK\_begins': 40,

         'TLINK\_ends': 12,

         'TLINK\_during': 25,

         None: 1})

**TLINK (Document)**

**Document 0**

**Patient 1:** Counter({'TLINK\_simultaneous': 75,

         'TLINK\_isIncluded': 14,

         'TLINK\_after': 13,

         'TLINK\_before\_overlap': 2,

         'TLINK\_endedBy': 1,

         'TLINK\_identity': 12,

         'TLINK\_begunBy': 1,

         'TLINK\_before': 4,

         'TLINK\_overlap\_after': 3,

         'TLINK\_includes': 2})

Total: 127

**Document 1**

**Patient 2:** Counter({'TLINK\_before': 14,

         'TLINK\_after': 37,

         'TLINK\_isIncluded': 26,

         'TLINK\_identity': 39,

         'TLINK\_simultaneous': 62,

         'TLINK\_begunBy': 4,

         'TLINK\_overlap\_after': 1,

         'TLINK\_begins': 1,

         'TLINK\_includes': 15,

         'TLINK\_ends': 1,

         'TLINK\_before\_overlap': 1})

Total: 201

**Document 2**

**Patient 3:** Counter({'TLINK\_before': 22,

         'TLINK\_isIncluded': 33,

         'TLINK\_after': 44,

         'TLINK\_identity': 57,

         'TLINK\_includes': 24,

         'TLINK\_simultaneous': 65,

         'TLINK\_before\_overlap': 6,

         'TLINK\_begins': 24,

         'TLINK\_during': 2,

         'TLINK\_ends': 9,

         'TLINK\_overlap\_after': 4,

         'TLINK\_begunBy': 5,

         'TLINK\_endedBy': 2})

Total: 297

**Document 3**

**Patient 4:** Counter({'TLINK\_before': 18,

         'TLINK\_identity': 34,

         'TLINK\_isIncluded': 29,

         'TLINK\_after': 33,

         'TLINK\_includes': 15,

         'TLINK\_simultaneous': 74,

         'TLINK\_overlap\_after': 5,

         'TLINK\_before\_overlap': 5,

         'TLINK\_begunBy': 2,

         'TLINK\_begins': 1})

Total: 216

**Document 4**

**Patient 5:** Counter({'TLINK\_simultaneous': 61,

         'TLINK\_isIncluded': 16,

         'TLINK\_before': 10,

         'TLINK\_before\_overlap': 2,

         'TLINK\_overlap\_after': 2,

         'TLINK\_after': 23,

         'TLINK\_includes': 12,

         'TLINK\_identity': 10,

         'TLINK\_begunBy': 5,

         'TLINK\_begins': 2,

         'TLINK\_endedBy': 2,

         'TLINK\_during': 1})

Total:146

**Document 5**

**Patient 6:** Counter({'TLINK\_simultaneous': 82,

         'TLINK\_before': 22,

         'TLINK\_isIncluded': 40,

         'TLINK\_after': 41,

         'TLINK\_includes': 15,

         'TLINK\_before\_overlap': 4,

         'TLINK\_identity': 62,

         'TLINK\_overlap\_after': 8,

         'TLINK\_during': 5,

         'TLINK\_begunBy': 8,

         'TLINK\_begins': 3})

total : 290

**Document 6**

**Patient 7:** Counter({'TLINK\_simultaneous': 48,

         'TLINK\_isIncluded': 27,

         'TLINK\_after': 30,

         'TLINK\_before': 13,

         'TLINK\_overlap\_after': 6,

         'TLINK\_identity': 19,

         'TLINK\_includes': 8,

         'TLINK\_before\_overlap': 5,

         'TLINK\_begunBy': 1,

         'TLINK\_during': 2,

         'TLINK\_begins': 1})

Total: 160

**Document 7**

**Patient 8:** Counter({'TLINK\_simultaneous': 98,

         'TLINK\_isIncluded': 39,

         'TLINK\_after': 52,

         'TLINK\_before\_overlap': 2,

         'TLINK\_identity': 51,

         'TLINK\_overlap\_after': 4,

         'TLINK\_includes': 13,

         'TLINK\_before': 20,

         'TLINK\_during': 5,

         'TLINK\_begunBy': 1,

         'TLINK\_begins': 4})

Total: 289

**Document 8**

**Patient 9:** Counter({'TLINK\_before': 32,

         'TLINK\_isIncluded': 62,

         'TLINK\_identity': 61,

         'TLINK\_after': 64,

         'TLINK\_includes': 11,

         'TLINK\_simultaneous': 168,

         None: 1,

         'TLINK\_begins': 4,

         'TLINK\_ends': 2,

         'TLINK\_before\_overlap': 3,

         'TLINK\_begunBy': 10,

         'TLINK\_during': 10,

         'TLINK\_overlap\_after': 3})

Total: 431

**TLINK (Relatório)**

**Patient 1**

 Group Consultation report #1: {'TLINK\_simultaneous': 61, 'TLINK\_isIncluded': 9, 'TLINK\_after': 8, 'TLINK\_before\_overlap': 2, 'TLINK\_endedBy': 1, 'TLINK\_identity': 8, 'TLINK\_begunBy': 1, 'TLINK\_before': 1, 'TLINK\_overlap\_after': 2}

 Group Consultation Report #2: {'TLINK\_simultaneous': 14, 'TLINK\_isIncluded': 5, 'TLINK\_before': 3, 'TLINK\_after': 5, 'TLINK\_identity': 4, 'TLINK\_overlap\_after': 1, 'TLINK\_includes': 2}

**Patient 2**

  Discharge report #1: {'TLINK\_before': 5, 'TLINK\_after': 11, 'TLINK\_isIncluded': 9, 'TLINK\_identity': 9, 'TLINK\_simultaneous': 11, 'TLINK\_begunBy': 2, 'TLINK\_overlap\_after': 1, 'TLINK\_begins': 1, 'TLINK\_includes': 4, 'TLINK\_ends': 1}

  Group consultation report #1: {'TLINK\_simultaneous': 28, 'TLINK\_isIncluded': 6, 'TLINK\_after': 9, 'TLINK\_before\_overlap': 1, 'TLINK\_identity': 13, 'TLINK\_includes': 4, 'TLINK\_begunBy': 2, 'TLINK\_before': 2}

  Group consultation report #2: {'TLINK\_simultaneous': 12, 'TLINK\_after': 7, 'TLINK\_isIncluded': 6, 'TLINK\_before': 3, 'TLINK\_includes': 4, 'TLINK\_identity': 13}

  Group consultation report #3: {'TLINK\_includes': 1, 'TLINK\_after': 5, 'TLINK\_isIncluded': 2, 'TLINK\_simultaneous': 3, 'TLINK\_identity': 4, 'TLINK\_before': 2}

  General report #1: {'TLINK\_includes': 2, 'TLINK\_simultaneous': 8, 'TLINK\_before': 2, 'TLINK\_after': 5, 'TLINK\_isIncluded': 3}

**Patient 3**

  Discharge report #1: {'TLINK\_before': 5, 'TLINK\_isIncluded': 5, 'TLINK\_after': 9, 'TLINK\_identity': 19, 'TLINK\_includes': 1, 'TLINK\_simultaneous': 11, 'TLINK\_before\_overlap': 1, 'TLINK\_begins': 8, 'TLINK\_during': 1, 'TLINK\_ends': 2, 'TLINK\_overlap\_after': 1}

  Discharge report #2: {'TLINK\_before': 6, 'TLINK\_after': 11, 'TLINK\_isIncluded': 7, 'TLINK\_identity': 10, 'TLINK\_includes': 4, 'TLINK\_simultaneous': 8, 'TLINK\_begunBy': 3, 'TLINK\_begins': 2, 'TLINK\_before\_overlap': 2, 'TLINK\_overlap\_after': 1, 'TLINK\_ends': 1}

  Discharge report #3: {'TLINK\_before': 6, 'TLINK\_isIncluded': 7, 'TLINK\_after': 10, 'TLINK\_identity': 14, 'TLINK\_includes': 6, 'TLINK\_simultaneous': 14, 'TLINK\_before\_overlap': 1, 'TLINK\_begins': 10, 'TLINK\_ends': 6, 'TLINK\_during': 1}

  Discharge report #4: {'TLINK\_simultaneous': 10, 'TLINK\_after': 10, 'TLINK\_isIncluded': 9, 'TLINK\_identity': 6, 'TLINK\_before': 4, 'TLINK\_includes': 5, 'TLINK\_begins': 2, 'TLINK\_before\_overlap': 1}

 General report #1: {'TLINK\_overlap\_after': 2, 'TLINK\_simultaneous': 22, 'TLINK\_isIncluded': 5, 'TLINK\_includes': 8, 'TLINK\_identity': 8, 'TLINK\_endedBy': 2, 'TLINK\_begunBy': 2, 'TLINK\_begins': 2, 'TLINK\_before\_overlap': 1, 'TLINK\_before': 1, 'TLINK\_after': 4}

**Patient 4**

  Discharge report #1: {'TLINK\_before': 3, 'TLINK\_identity': 9, 'TLINK\_isIncluded': 6, 'TLINK\_after': 5, 'TLINK\_includes': 3, 'TLINK\_simultaneous': 3, 'TLINK\_overlap\_after': 1, 'TLINK\_before\_overlap': 1}

 Group consultation report #1: {'TLINK\_simultaneous': 26, 'TLINK\_isIncluded': 9, 'TLINK\_after': 10, 'TLINK\_before\_overlap': 1, 'TLINK\_overlap\_after': 1, 'TLINK\_identity': 14, 'TLINK\_includes': 5, 'TLINK\_before': 4}

  General report #1: {'TLINK\_after': 18, 'TLINK\_isIncluded': 14, 'TLINK\_includes': 7, 'TLINK\_identity': 11, 'TLINK\_simultaneous': 45, 'TLINK\_before': 11, 'TLINK\_begunBy': 2, 'TLINK\_before\_overlap': 3, 'TLINK\_overlap\_after': 3, 'TLINK\_begins': 1}

**Patient 5**

Group consultation report #1: {'TLINK\_simultaneous': 20, 'TLINK\_isIncluded': 3, 'TLINK\_before': 1, 'TLINK\_before\_overlap': 1, 'TLINK\_overlap\_after': 1, 'TLINK\_after': 8, 'TLINK\_includes': 1, 'TLINK\_identity': 2}

Discharge report #1: {'TLINK\_before': 6, 'TLINK\_isIncluded': 7, 'TLINK\_after': 10, 'TLINK\_identity': 3, 'TLINK\_begunBy': 3, 'TLINK\_begins': 2, 'TLINK\_includes': 7, 'TLINK\_simultaneous': 23, 'TLINK\_before\_overlap': 1, 'TLINK\_endedBy': 1}

 Discharge report #2: {'TLINK\_before': 3, 'TLINK\_endedBy': 1, 'TLINK\_isIncluded': 6, 'TLINK\_identity': 5, 'TLINK\_after': 5, 'TLINK\_includes': 4, 'TLINK\_simultaneous': 18, 'TLINK\_overlap\_after': 1, 'TLINK\_during': 1, 'TLINK\_begunBy': 2}

**Patient 6**

Group consultation report #1: {'TLINK\_simultaneous': 19, 'TLINK\_before': 1, 'TLINK\_isIncluded': 7, 'TLINK\_after': 6, 'TLINK\_includes': 3, 'TLINK\_before\_overlap': 1, 'TLINK\_identity': 8}

Discharge report #1:{'TLINK\_before': 7, 'TLINK\_isIncluded': 7, 'TLINK\_after': 10, 'TLINK\_identity': 15, 'TLINK\_includes': 1, 'TLINK\_simultaneous': 30, 'TLINK\_before\_overlap': 1, 'TLINK\_overlap\_after': 4, 'TLINK\_during': 4, 'TLINK\_begunBy': 3, 'TLINK\_begins': 1}

Discharge report #2:{'TLINK\_before': 5, 'TLINK\_isIncluded': 12, 'TLINK\_identity': 26, 'TLINK\_after': 8, 'TLINK\_simultaneous': 14, 'TLINK\_includes': 5, 'TLINK\_during': 1, 'TLINK\_begunBy': 3, 'TLINK\_overlap\_after': 1}

Discharge report #3:{'TLINK\_before': 7, 'TLINK\_isIncluded': 8, 'TLINK\_identity': 10, 'TLINK\_after': 9, 'TLINK\_begins': 2, 'TLINK\_before\_overlap': 2, 'TLINK\_simultaneous': 10, 'TLINK\_includes': 5, 'TLINK\_overlap\_after': 1, 'TLINK\_begunBy': 2}

Group consultation report #2: {'TLINK\_after': 8, 'TLINK\_isIncluded': 6, 'TLINK\_before': 2, 'TLINK\_simultaneous': 9, 'TLINK\_includes': 1, 'TLINK\_overlap\_after': 2, 'TLINK\_identity': 3}

**Patient 7**

Group consultation report #1: {'TLINK\_simultaneous': 13, 'TLINK\_isIncluded': 8, 'TLINK\_after': 7, 'TLINK\_before': 1, 'TLINK\_overlap\_after': 2, 'TLINK\_identity': 4, 'TLINK\_includes': 3, 'TLINK\_before\_overlap': 3}

Group consultation report #2:{'TLINK\_simultaneous': 5, 'TLINK\_isIncluded': 3, 'TLINK\_after': 3, 'TLINK\_before': 3, 'TLINK\_includes': 1, 'TLINK\_identity': 3, 'TLINK\_overlap\_after': 2}

Group consultation report #3: {'TLINK\_simultaneous': 9, 'TLINK\_isIncluded': 3, 'TLINK\_after': 5, 'TLINK\_before': 3, 'TLINK\_includes': 1, 'TLINK\_identity': 2, 'TLINK\_before\_overlap': 1}

Discharge report #1: {'TLINK\_before': 5, 'TLINK\_isIncluded': 7, 'TLINK\_identity': 8, 'TLINK\_after': 8, 'TLINK\_includes': 2, 'TLINK\_simultaneous': 13, 'TLINK\_begunBy': 1, 'TLINK\_during': 2, 'TLINK\_begins': 1, 'TLINK\_overlap\_after': 1}

Group consultation report #4: {'TLINK\_simultaneous': 8, 'TLINK\_isIncluded': 6, 'TLINK\_identity': 2, 'TLINK\_before': 1, 'TLINK\_after': 7, 'TLINK\_includes': 1, 'TLINK\_overlap\_after': 1, 'TLINK\_before\_overlap': 1}

**Patient 8**

Group consultation report #1: {'TLINK\_simultaneous': 27, 'TLINK\_isIncluded': 2, 'TLINK\_after': 9, 'TLINK\_before\_overlap': 1, 'TLINK\_identity': 13, 'TLINK\_overlap\_after': 1, 'TLINK\_includes': 2, 'TLINK\_before': 1}

Discharge report #1: {'TLINK\_before': 9, 'TLINK\_isIncluded': 18, 'TLINK\_identity': 17, 'TLINK\_after': 13, 'TLINK\_includes': 5, 'TLINK\_simultaneous': 24, 'TLINK\_during': 5, 'TLINK\_begunBy': 1, 'TLINK\_overlap\_after': 2, 'TLINK\_begins': 1}

Discharge report #1: {'TLINK\_after': 10, 'TLINK\_before': 6, 'TLINK\_identity': 10, 'TLINK\_isIncluded': 9, 'TLINK\_simultaneous': 24, 'TLINK\_includes': 1, 'TLINK\_overlap\_after': 1, 'TLINK\_begins': 1}

Group consultation report #2:  {'TLINK\_simultaneous': 12, 'TLINK\_isIncluded': 3, 'TLINK\_after': 12, 'TLINK\_before': 2, 'TLINK\_identity': 8, 'TLINK\_includes': 2, 'TLINK\_before\_overlap': 1}

Group consultation report #3:  {'TLINK\_simultaneous': 11, 'TLINK\_isIncluded': 7, 'TLINK\_before': 2, 'TLINK\_after': 8, 'TLINK\_includes': 3, 'TLINK\_identity': 3, 'TLINK\_begins': 2}

**Patient 9**

Discharge report #1: {'TLINK\_before': 17, 'TLINK\_isIncluded': 33, 'TLINK\_identity': 40, 'TLINK\_after': 24, 'TLINK\_includes': 3, 'TLINK\_simultaneous': 89, None: 1, 'TLINK\_begins': 3, 'TLINK\_ends': 2, 'TLINK\_before\_overlap': 2, 'TLINK\_begunBy': 5, 'TLINK\_during': 8, 'TLINK\_overlap\_after': 2}

Group consultation report #1: {'TLINK\_simultaneous': 23, 'TLINK\_isIncluded': 3, 'TLINK\_after': 7, 'TLINK\_before': 1, 'TLINK\_identity': 8, 'TLINK\_begunBy': 3, 'TLINK\_overlap\_after': 1, 'TLINK\_includes': 3}

Discharge report #2: {'TLINK\_after': 16, 'TLINK\_isIncluded': 14, 'TLINK\_before': 8, 'TLINK\_identity': 4, 'TLINK\_includes': 1, 'TLINK\_simultaneous': 23, 'TLINK\_begunBy': 2, 'TLINK\_before\_overlap': 1, 'TLINK\_begins': 1, 'TLINK\_during': 1}

Discharge report #3: {'TLINK\_before': 3, 'TLINK\_identity': 5, 'TLINK\_isIncluded': 9, 'TLINK\_after': 7, 'TLINK\_simultaneous': 20, 'TLINK\_includes': 1, 'TLINK\_during': 1}

Group consultation report #2: {'TLINK\_after': 10, 'TLINK\_isIncluded': 3, 'TLINK\_before': 3, 'TLINK\_simultaneous': 13, 'TLINK\_includes': 3, 'TLINK\_identity': 4}

**RELATIONS Based on Markables**

Tlinks between **Times** and **Times**: 117

Tlinks between **General Events** and **General Events**: 376

Tlinks between **Specialized Events** and **Specialized Events**: 678

Tlinks between **General Events** and **Times**: 170

Tlinks between **Specialized Events** and **Times**: 103

Tlinks between **General Events** and **Specialized Events**: 713

sum: 2157

**RELATIONS Based on Attributes**

**Relation: General Event -> General Event**

**Attribute: Class**

Counter({('TLINK\_after', 'Occurrence', 'Occurrence'): 17,

         ('TLINK\_before\_overlap', 'None', 'None'): 1,

         ('TLINK\_simultaneous', 'Occurrence', 'State'): 5,

         ('TLINK\_simultaneous', 'None', 'State'): 40,

         ('TLINK\_simultaneous', 'State', 'State'): 6,

         ('TLINK\_simultaneous', 'None', 'None'): 40,

         ('TLINK\_simultaneous', 'None', 'Reporting'): 1,

         ('TLINK\_before', 'None', 'None'): 60,

         ('TLINK\_after', 'None', 'Reporting'): 6,

         ('TLINK\_simultaneous', 'Reporting', 'State'): 6,

         ('TLINK\_simultaneous', 'None', 'Occurrence'): 14,

         ('TLINK\_identity', 'None', 'None'): 42,

         ('TLINK\_after', 'I\_Action', 'I\_Action'): 10,

         ('TLINK\_after', 'None', 'None'): 31,

         ('TLINK\_after', 'None', 'Occurrence'): 16,

         ('TLINK\_includes', 'None', 'State'): 3,

         ('TLINK\_begunBy', 'None', 'Occurrence'): 2,

         ('TLINK\_isIncluded', 'None', 'Occurrence'): 7,

         ('TLINK\_simultaneous', 'I\_Action', 'None'): 1,

         ('TLINK\_after', 'None', 'Perception'): 2,

         ('TLINK\_includes', 'Perception', 'State'): 1,

         ('TLINK\_includes', 'None', 'Reporting'): 1,

         ('TLINK\_simultaneous', 'I\_Action', 'I\_Action'): 1,

         ('TLINK\_before', 'None', 'State'): 7,

         ('TLINK\_includes', 'None', 'Occurrence'): 5,

         ('TLINK\_includes', 'Occurrence', 'Occurrence'): 2,

         ('TLINK\_identity', 'State', 'State'): 1,

         ('TLINK\_includes', 'Occurrence', 'State'): 2,

         ('TLINK\_begins', 'Occurrence', 'Occurrence'): 1,

         ('TLINK\_after', 'None', 'State'): 8,

         ('TLINK\_before', 'Occurrence', 'Occurrence'): 3,

         ('TLINK\_simultaneous', 'Occurrence', 'Occurrence'): 1,

         ('TLINK\_after', 'I\_Action', 'None'): 2,

         ('TLINK\_isIncluded', 'None', 'State'): 5,

         ('TLINK\_includes', 'None', 'None'): 2,

         ('TLINK\_before', 'None', 'Occurrence'): 4,

         ('TLINK\_isIncluded', 'Occurrence', 'Occurrence'): 1,

         ('TLINK\_after', 'I\_Action', 'I\_State'): 1,

         ('TLINK\_isIncluded', 'None', 'None'): 1,

         ('TLINK\_overlap\_after', 'State', 'State'): 1,

         ('TLINK\_before\_overlap', 'Occurrence', 'State'): 1,

         ('TLINK\_after', 'I\_Action', 'Occurrence'): 3,

         ('TLINK\_simultaneous', 'Perception', 'State'): 1,

         ('TLINK\_identity', 'Occurrence', 'Occurrence'): 1,

         ('TLINK\_overlap\_after', 'None', 'Occurrence'): 1,

         ('TLINK\_overlap\_after', 'Occurrence', 'State'): 1,

         ('TLINK\_begins', 'None', 'Occurrence'): 1,

         ('TLINK\_after', 'I\_Action', 'State'): 1,

         ('TLINK\_before', 'None', 'Reporting'): 1,

         ('TLINK\_before', 'Occurrence', 'State'): 1,

         ('TLINK\_before\_overlap', 'None', 'Occurrence'): 1,

         ('TLINK\_after', 'State', 'State'): 1,

         ('TLINK\_begunBy', 'None', 'State'): 2})

**Relation: General Event -> General Event**

**Attribute: Tense**

Counter({('TLINK\_after', 'None', 'Past'): 22,

         ('TLINK\_before\_overlap', 'None', 'None'): 1,

         ('TLINK\_simultaneous', 'None', 'Past'): 31,

         ('TLINK\_simultaneous', 'None', 'None'): 51,

         ('TLINK\_simultaneous', 'Future', 'None'): 2,

         ('TLINK\_after', 'Past', 'Past'): 14,

         ('TLINK\_before', 'None', 'None'): 62,

         ('TLINK\_after', 'None', 'None'): 43,

         ('TLINK\_simultaneous', 'None', 'Present'): 25,

         ('TLINK\_identity', 'None', 'None'): 42,

         ('TLINK\_after', 'None', 'Present'): 16,

         ('TLINK\_after', 'Past', 'Present'): 2,

         ('TLINK\_includes', 'None', 'Past'): 8,

         ('TLINK\_begunBy', 'None', 'Past'): 4,

         ('TLINK\_isIncluded', 'None', 'Past'): 10,

         ('TLINK\_includes', 'None', 'Present'): 3,

         ('TLINK\_includes', 'None', 'None'): 3,

         ('TLINK\_before', 'None', 'Present'): 3,

         ('TLINK\_simultaneous', 'Past', 'Past'): 7,

         ('TLINK\_identity', 'Present', 'Present'): 1,

         ('TLINK\_includes', 'Past', 'Present'): 2,

         ('TLINK\_begins', 'None', 'Past'): 1,

         ('TLINK\_before', 'None', 'Past'): 9,

         ('TLINK\_isIncluded', 'None', 'Present'): 2,

         ('TLINK\_isIncluded', 'None', 'None'): 2,

         ('TLINK\_overlap\_after', 'Present', 'Present'): 1,

         ('TLINK\_before\_overlap', 'Past', 'Present'): 1,

         ('TLINK\_identity', 'Past', 'Past'): 1,

         ('TLINK\_overlap\_after', 'None', 'None'): 1,

         ('TLINK\_overlap\_after', 'None', 'Present'): 1,

         ('TLINK\_begins', 'None', 'Present'): 1,

         ('TLINK\_before', 'Past', 'Past'): 2,

         ('TLINK\_before\_overlap', 'None', 'Past'): 1,

         ('TLINK\_after', 'Present', 'Present'): 1})

**Relation: General Event -> General Event**

**Attribute: Pos**

Counter({('TLINK\_after', 'Verb', 'Verb'): 30,

         ('TLINK\_before\_overlap', 'Noun', 'Noun'): 1,

         ('TLINK\_simultaneous', 'Verb', 'Verb'): 19,

         ('TLINK\_simultaneous', 'Noun', 'Verb'): 49,

         ('TLINK\_simultaneous', 'Noun', 'Noun'): 25,

         ('TLINK\_before', 'Noun', 'Noun'): 59,

         ('TLINK\_after', 'Noun', 'Verb'): 34,

         ('TLINK\_identity', 'Noun', 'Noun'): 39,

         ('TLINK\_simultaneous', 'Adjective', 'Noun'): 18,

         ('TLINK\_before', 'Noun', 'Verb'): 12,

         ('TLINK\_identity', 'Noun', 'Verb'): 1,

         ('TLINK\_after', 'Noun', 'Noun'): 30,

         ('TLINK\_includes', 'Noun', 'Verb'): 8,

         ('TLINK\_begunBy', 'Noun', 'Verb'): 2,

         ('TLINK\_isIncluded', 'Noun', 'Noun'): 1,

         ('TLINK\_includes', 'Verb', 'Verb'): 5,

         ('TLINK\_before', 'Adjective', 'Verb'): 1,

         ('TLINK\_simultaneous', 'Adjective', 'Verb'): 3,

         ('TLINK\_identity', 'None', 'Noun'): 2,

         ('TLINK\_after', 'None', 'Noun'): 1,

         ('TLINK\_identity', 'Verb', 'Verb'): 2,

         ('TLINK\_begins', 'Verb', 'Verb'): 1,

         ('TLINK\_isIncluded', 'Noun', 'Verb'): 11,

         ('TLINK\_before', 'Verb', 'Verb'): 4,

         ('TLINK\_after', 'Adjective', 'Noun'): 2,

         ('TLINK\_includes', 'Noun', 'Noun'): 2,

         ('TLINK\_isIncluded', 'Verb', 'Verb'): 1,

         ('TLINK\_isIncluded', 'Adjective', 'Noun'): 1,

         ('TLINK\_overlap\_after', 'Noun', 'Verb'): 2,

         ('TLINK\_before\_overlap', 'Verb', 'Verb'): 1,

         ('TLINK\_overlap\_after', 'Verb', 'Verb'): 1,

         ('TLINK\_begins', 'Noun', 'Verb'): 1,

         ('TLINK\_before\_overlap', 'Noun', 'Verb'): 1,

         ('TLINK\_simultaneous', 'Adjective', 'Adjective'): 2,

         ('TLINK\_after', 'Adjective', 'Verb'): 1,

         ('TLINK\_includes', 'Adjective', 'Noun'): 1,

         ('TLINK\_begunBy', 'Noun', 'Noun'): 2})

**Relation: General Event -> General Event**

**Attribute: Polarity**

Counter({('TLINK\_after', 'Pos', 'Pos'): 94,

         ('TLINK\_before\_overlap', 'Pos', 'Pos'): 3,

         ('TLINK\_simultaneous', 'Pos', 'Pos'): 111,

         ('TLINK\_simultaneous', 'Neg', 'Pos'): 3,

         ('TLINK\_before', 'Pos', 'Pos'): 73,

         ('TLINK\_identity', 'Pos', 'Pos'): 40,

         ('TLINK\_includes', 'Pos', 'Pos'): 16,

         ('TLINK\_begunBy', 'Pos', 'Pos'): 3,

         ('TLINK\_isIncluded', 'Pos', 'Pos'): 13,

         ('TLINK\_identity', 'None', 'Pos'): 2,

         ('TLINK\_after', 'None', 'Pos'): 1,

         ('TLINK\_after', 'Neg', 'Pos'): 3,

         ('TLINK\_begins', 'Pos', 'Pos'): 2,

         ('TLINK\_before', 'Neg', 'Pos'): 3,

         ('TLINK\_identity', 'Neg', 'Neg'): 1,

         ('TLINK\_isIncluded', 'Neg', 'Pos'): 1,

         ('TLINK\_identity', 'Neg', 'Pos'): 1,

         ('TLINK\_overlap\_after', 'Pos', 'Pos'): 3,

         ('TLINK\_simultaneous', 'None', 'Pos'): 2,

         ('TLINK\_begunBy', 'Neg', 'Pos'): 1})

**Relation: General Event -> General Event**

**Attribute: Event Type**

{('TLINK\_before', 'None', 'None'): 60,

 ('TLINK\_identity', 'None', 'None'): 42,

 ('TLINK\_simultaneous', 'None', 'State'): 40,

 ('TLINK\_simultaneous', 'None', 'None'): 40,

 ('TLINK\_after', 'None', 'None'): 31,

 ('TLINK\_after', 'Transition', 'Transition'): 26,

 ('TLINK\_after', 'None', 'Transition'): 22,

 ('TLINK\_simultaneous', 'None', 'Transition'): 12,

 ('TLINK\_simultaneous', 'State', 'Transition'): 11,

 ('TLINK\_after', 'None', 'State'): 8,

 ('TLINK\_before', 'None', 'State'): 7,

 ('TLINK\_simultaneous', 'State', 'State'): 6,

 ('TLINK\_isIncluded', 'None', 'Transition'): 6,

 ('TLINK\_after', 'Process', 'Transition'): 5,

 ('TLINK\_includes', 'None', 'Transition'): 5,

 ('TLINK\_isIncluded', 'None', 'State'): 5,

 ('TLINK\_before', 'None', 'Transition'): 5,

 ('TLINK\_after', 'None', 'Process'): 4,

 ('TLINK\_simultaneous', 'None', 'Process'): 4,

 ('TLINK\_includes', 'None', 'State'): 3,

 ('TLINK\_includes', 'State', 'Transition'): 3,

 ('TLINK\_before', 'Transition', 'Transition'): 3,

 ('TLINK\_begunBy', 'None', 'Transition'): 2,

 ('TLINK\_includes', 'None', 'None'): 2,

 ('TLINK\_begunBy', 'None', 'State'): 2,

 ('TLINK\_before\_overlap', 'None', 'None'): 1,

 ('TLINK\_isIncluded', 'None', 'Process'): 1,

 ('TLINK\_simultaneous', 'Transition', 'Transition'): 1,

 ('TLINK\_includes', 'Process', 'Transition'): 1,

 ('TLINK\_identity', 'State', 'State'): 1,

 ('TLINK\_includes', 'None', 'Process'): 1,

 ('TLINK\_begins', 'Process', 'Transition'): 1,

 ('TLINK\_simultaneous', 'Process', 'Transition'): 1,

 ('TLINK\_includes', 'Transition', 'Transition'): 1,

 ('TLINK\_isIncluded', 'Transition', 'Transition'): 1,

 ('TLINK\_isIncluded', 'None', 'None'): 1,

 ('TLINK\_overlap\_after', 'State', 'State'): 1,

 ('TLINK\_before\_overlap', 'State', 'Transition'): 1,

 ('TLINK\_identity', 'Transition', 'Transition'): 1,

 ('TLINK\_overlap\_after', 'None', 'Process'): 1,

 ('TLINK\_overlap\_after', 'Process', 'State'): 1,

 ('TLINK\_begins', 'None', 'Transition'): 1,

 ('TLINK\_after', 'State', 'Transition'): 1,

 ('TLINK\_before', 'State', 'Transition'): 1,

 ('TLINK\_before\_overlap', 'None', 'Transition'): 1,

 ('TLINK\_simultaneous', 'Process', 'State'): 1,

 ('TLINK\_after', 'State', 'State'): 1}

**Relation: General Event -> General Event**

**Attribute: Class**

Counter({('TLINK\_simultaneous', 'None', 'None'): 51,

         ('TLINK\_simultaneous', 'None', 'State'): 42,

         ('TLINK\_before', 'None', 'Occurrence'): 4,

         ('TLINK\_overlap\_after', 'None', 'Occurrence'): 15,

         ('TLINK\_after', 'None', 'None'): 26,

         ('TLINK\_after', 'None', 'Occurrence'): 37,

         ('TLINK\_isIncluded', 'None', 'Occurrence'): 25,

         ('TLINK\_isIncluded', 'I\_Action', 'None'): 12,

         ('TLINK\_includes', 'None', 'None'): 8,

         ('TLINK\_includes', 'None', 'State'): 3,

         ('TLINK\_identity', 'None', 'None'): 5,

         ('TLINK\_begunBy', 'None', 'Occurrence'): 1,

         ('TLINK\_simultaneous', 'None', 'Occurrence'): 18,

         ('TLINK\_before\_overlap', 'None', 'None'): 4,

         ('TLINK\_after', 'None', 'State'): 37,

         ('TLINK\_after', 'I\_Action', 'None'): 2,

         ('TLINK\_before', 'None', 'None'): 3,

         ('TLINK\_after', 'None', 'Reporting'): 3,

         ('TLINK\_begins', 'None', 'None'): 7,

         ('TLINK\_isIncluded', 'None', 'None'): 17,

         ('TLINK\_isIncluded', 'None', 'State'): 4,

         ('TLINK\_ends', 'None', 'None'): 1,

         ('TLINK\_begins', 'None', 'Occurrence'): 1,

         ('TLINK\_overlap\_after', 'None', 'None'): 4,

         ('TLINK\_before', 'None', 'State'): 5,

         ('TLINK\_overlap\_after', 'None', 'State'): 4,

         ('TLINK\_includes', 'None', 'Occurrence'): 1,

         ('TLINK\_overlap\_after', 'I\_Action', 'None'): 1,

         ('TLINK\_before\_overlap', 'None', 'State'): 1,

         ('TLINK\_identity', 'None', 'State'): 1,

         ('TLINK\_during', 'None', 'Reporting'): 1})

**Relation: General Event -> Specialized Event**

**Attribute: Tense**

Counter({('TLINK\_simultaneous', 'None', 'None'): 59,

         ('TLINK\_before', 'None', 'None'): 5,

         ('TLINK\_overlap\_after', 'None', 'Past'): 16,

         ('TLINK\_after', 'None', 'None'): 31,

         ('TLINK\_after', 'None', 'Past'): 56,

         ('TLINK\_isIncluded', 'None', 'Past'): 27,

         ('TLINK\_simultaneous', 'None', 'Past'): 45,

         ('TLINK\_simultaneous', 'None', 'Present'): 7,

         ('TLINK\_isIncluded', 'None', 'Present'): 11,

         ('TLINK\_includes', 'None', 'None'): 9,

         ('TLINK\_identity', 'None', 'None'): 5,

         ('TLINK\_begunBy', 'None', 'Past'): 1,

         ('TLINK\_before\_overlap', 'None', 'None'): 4,

         ('TLINK\_after', 'None', 'Present'): 18,

         ('TLINK\_begins', 'None', 'None'): 7,

         ('TLINK\_isIncluded', 'None', 'None'): 19,

         ('TLINK\_ends', 'None', 'None'): 1,

         ('TLINK\_begins', 'None', 'Past'): 1,

         ('TLINK\_overlap\_after', 'None', 'None'): 6,

         ('TLINK\_includes', 'None', 'Present'): 2,

         ('TLINK\_isIncluded', 'Future', 'None'): 1,

         ('TLINK\_before', 'None', 'Past'): 5,

         ('TLINK\_before', 'None', 'Present'): 2,

         ('TLINK\_includes', 'None', 'Past'): 1,

         ('TLINK\_overlap\_after', 'None', 'Present'): 2,

         ('TLINK\_before\_overlap', 'None', 'Present'): 1,

         ('TLINK\_identity', 'None', 'Past'): 1,

         ('TLINK\_during', 'None', 'Past'): 1})

**Relation: General Event -> Specialized Event**

**Attribute: Pos**

Counter({('TLINK\_simultaneous', 'Adjective', 'Noun'): 14,

         ('TLINK\_simultaneous', 'Noun', 'Verb'): 49,

         ('TLINK\_before', 'Noun', 'Verb'): 7,

         ('TLINK\_overlap\_after', 'Noun', 'Verb'): 17,

         ('TLINK\_after', 'Noun', 'Noun'): 25,

         ('TLINK\_after', 'Pronoun', 'Verb'): 6,

         ('TLINK\_simultaneous', 'Noun', 'Noun'): 41,

         ('TLINK\_isIncluded', 'Noun', 'Verb'): 35,

         ('TLINK\_simultaneous', 'Adjective', 'Pronoun'): 1,

         ('TLINK\_after', 'Adjective', 'Noun'): 2,

         ('TLINK\_after', 'None', 'Verb'): 1,

         ('TLINK\_includes', 'Noun', 'Noun'): 8,

         ('TLINK\_isIncluded', 'Adjective', 'Verb'): 3,

         ('TLINK\_includes', 'Noun', 'Verb'): 3,

         ('TLINK\_identity', 'Noun', 'Noun'): 5,

         ('TLINK\_begunBy', 'Pronoun', 'Verb'): 1,

         ('TLINK\_before\_overlap', 'Noun', 'Noun'): 4,

         ('TLINK\_after', 'Noun', 'Verb'): 70,

         ('TLINK\_before', 'Noun', 'Noun'): 5,

         ('TLINK\_begins', 'Noun', 'Noun'): 5,

         ('TLINK\_isIncluded', 'Noun', 'Noun'): 18,

         ('TLINK\_overlap\_after', 'Noun', 'Noun'): 6,

         ('TLINK\_ends', 'Noun', 'Noun'): 1,

         ('TLINK\_begins', 'Adjective', 'Noun'): 2,

         ('TLINK\_simultaneous', 'Preposition', 'Verb'): 1,

         ('TLINK\_begins', 'Noun', 'Verb'): 1,

         ('TLINK\_includes', 'Adjective', 'Verb'): 1,

         ('TLINK\_simultaneous', 'Pronoun', 'Verb'): 3,

         ('TLINK\_isIncluded', 'Adjective', 'Noun'): 2,

         ('TLINK\_before\_overlap', 'Noun', 'Verb'): 1,

         ('TLINK\_overlap\_after', 'Adjective', 'Verb'): 1,

         ('TLINK\_after', 'Adjective', 'Verb'): 1,

         ('TLINK\_simultaneous', 'Noun', 'Other'): 1,

         ('TLINK\_identity', 'Noun', 'Verb'): 1,

         ('TLINK\_simultaneous', 'Adjective', 'Verb'): 1,

         ('TLINK\_during', 'Noun', 'Verb'): 1})

**Relation: General Event -> Specialized Event**

**Attribute: Polarity**

Counter({('TLINK\_simultaneous', 'Pos', 'Pos'): 88,

         ('TLINK\_before', 'Pos', 'Pos'): 11,

         ('TLINK\_overlap\_after', 'Pos', 'Pos'): 17,

         ('TLINK\_after', 'Pos', 'Pos'): 96,

         ('TLINK\_isIncluded', 'Pos', 'Pos'): 55,

         ('TLINK\_after', 'None', 'Pos'): 4,

         ('TLINK\_includes', 'Pos', 'Pos'): 12,

         ('TLINK\_identity', 'Pos', 'Pos'): 5,

         ('TLINK\_begunBy', 'Pos', 'Pos'): 1,

         ('TLINK\_before\_overlap', 'Pos', 'Pos'): 5,

         ('TLINK\_simultaneous', 'Neg', 'Pos'): 20,

         ('TLINK\_begins', 'Pos', 'Pos'): 8,

         ('TLINK\_simultaneous', 'Neg', 'None'): 1,

         ('TLINK\_overlap\_after', 'Neg', 'Pos'): 4,

         ('TLINK\_ends', 'Pos', 'Pos'): 1,

         ('TLINK\_after', 'Neg', 'Pos'): 5,

         ('TLINK\_overlap\_after', 'None', 'Pos'): 3,

         ('TLINK\_isIncluded', 'None', 'Pos'): 1,

         ('TLINK\_before', 'Neg', 'Pos'): 1,

         ('TLINK\_simultaneous', 'None', 'Pos'): 2,

         ('TLINK\_identity', 'None', 'Pos'): 1,

         ('TLINK\_isIncluded', 'Neg', 'Pos'): 2,

         ('TLINK\_during', 'Pos', 'Pos'): 1})

**Relation: General Event -> Specialized  Event**

**Attribute: Event Type**

Counter({('TLINK\_simultaneous', 'None', 'None'): 51,

         ('TLINK\_simultaneous', 'None', 'State'): 42,

         ('TLINK\_before', 'None', 'Transition'): 3,

         ('TLINK\_overlap\_after', 'None', 'Transition'): 14,

         ('TLINK\_after', 'None', 'None'): 26,

         ('TLINK\_after', 'None', 'Transition'): 32,

         ('TLINK\_isIncluded', 'None', 'Transition'): 34,

         ('TLINK\_includes', 'None', 'None'): 8,

         ('TLINK\_includes', 'None', 'State'): 3,

         ('TLINK\_identity', 'None', 'None'): 5,

         ('TLINK\_begunBy', 'None', 'Transition'): 1,

         ('TLINK\_simultaneous', 'None', 'Process'): 12,

         ('TLINK\_before\_overlap', 'None', 'None'): 4,

         ('TLINK\_after', 'None', 'State'): 37,

         ('TLINK\_before', 'None', 'None'): 3,

         ('TLINK\_after', 'None', 'Process'): 10,

         ('TLINK\_begins', 'None', 'None'): 7,

         ('TLINK\_isIncluded', 'None', 'None'): 17,

         ('TLINK\_isIncluded', 'None', 'Process'): 3,

         ('TLINK\_isIncluded', 'None', 'State'): 4,

         ('TLINK\_ends', 'None', 'None'): 1,

         ('TLINK\_simultaneous', 'None', 'Transition'): 6,

         ('TLINK\_begins', 'None', 'Transition'): 1,

         ('TLINK\_overlap\_after', 'None', 'None'): 4,

         ('TLINK\_before', 'None', 'State'): 5,

         ('TLINK\_overlap\_after', 'None', 'Process'): 2,

         ('TLINK\_before', 'None', 'Process'): 1,

         ('TLINK\_overlap\_after', 'None', 'State'): 4,

         ('TLINK\_includes', 'None', 'Transition'): 1,

         ('TLINK\_before\_overlap', 'None', 'State'): 1,

         ('TLINK\_identity', 'None', 'State'): 1,

         ('TLINK\_during', 'None', 'Transition'): 1})

**Relation: Specialized Event -> General Event**

**Attribute: Class**

Counter({('TLINK\_begunBy', 'None', 'Occurrence'): 13,

         ('TLINK\_simultaneous', 'None', 'State'): 70,

         ('TLINK\_simultaneous', 'None', 'Occurrence'): 58,

         ('TLINK\_overlap\_after', 'None', 'None'): 2,

         ('TLINK\_simultaneous', 'None', 'Reporting'): 2,

         ('TLINK\_after', 'I\_Action', 'None'): 15,

         ('TLINK\_simultaneous', 'None', 'None'): 80,

         ('TLINK\_identity', 'None', 'Occurrence'): 1,

         ('TLINK\_isIncluded', 'None', 'None'): 10,

         ('TLINK\_before', 'None', 'None'): 7,

         ('TLINK\_after', 'None', 'Occurrence'): 7,

         ('TLINK\_includes', 'None', 'None'): 37,

         ('TLINK\_identity', 'None', 'None'): 7,

         ('TLINK\_after', 'None', 'None'): 16,

         ('TLINK\_isIncluded', 'None', 'State'): 3,

         ('TLINK\_after', 'None', 'State'): 5,

         ('TLINK\_includes', 'None', 'Occurrence'): 6,

         ('TLINK\_before\_overlap', 'None', 'Occurrence'): 1,

         ('TLINK\_before\_overlap', 'None', 'None'): 5,

         ('TLINK\_begunBy', 'None', 'None'): 4,

         ('TLINK\_before\_overlap', 'None', 'State'): 4,

         ('TLINK\_begins', 'None', 'None'): 2,

         ('TLINK\_endedBy', 'None', 'Occurrence'): 1,

         ('TLINK\_includes', 'I\_Action', 'None'): 1,

         ('TLINK\_endedBy', 'None', 'None'): 1,

         ('TLINK\_after', 'I\_State', 'None'): 1,

         ('TLINK\_overlap\_after', 'None', 'Occurrence'): 1,

         ('TLINK\_includes', 'None', 'State'): 2,

         ('TLINK\_before', 'None', 'Occurrence'): 3,

         ('TLINK\_before', 'None', 'State'): 2,

         ('TLINK\_isIncluded', 'None', 'Occurrence'): 2})

**Relation: Specialized Event -> General Event**

**Attribute: Tense**

Counter({('TLINK\_begunBy', 'None', 'Present'): 2,

         ('TLINK\_simultaneous', 'None', 'None'): 93,

         ('TLINK\_simultaneous', 'None', 'Past'): 101,

         ('TLINK\_overlap\_after', 'None', 'None'): 2,

         ('TLINK\_simultaneous', 'Future', 'None'): 1,

         ('TLINK\_simultaneous', 'None', 'Present'): 15,

         ('TLINK\_after', 'None', 'Present'): 1,

         ('TLINK\_identity', 'None', 'Past'): 1,

         ('TLINK\_isIncluded', 'None', 'None'): 10,

         ('TLINK\_after', 'None', 'None'): 32,

         ('TLINK\_before', 'None', 'None'): 8,

         ('TLINK\_after', 'None', 'Past'): 11,

         ('TLINK\_includes', 'None', 'None'): 37,

         ('TLINK\_begunBy', 'None', 'Past'): 11,

         ('TLINK\_identity', 'None', 'None'): 7,

         ('TLINK\_isIncluded', 'None', 'Present'): 2,

         ('TLINK\_includes', 'None', 'Past'): 6,

         ('TLINK\_before\_overlap', 'None', 'Past'): 5,

         ('TLINK\_before\_overlap', 'None', 'None'): 5,

         ('TLINK\_begunBy', 'None', 'None'): 4,

         ('TLINK\_begins', 'None', 'None'): 2,

         ('TLINK\_endedBy', 'None', 'Past'): 1,

         ('TLINK\_includes', 'None', 'Present'): 3,

         ('TLINK\_endedBy', 'None', 'None'): 1,

         ('TLINK\_overlap\_after', 'None', 'Past'): 1,

         ('TLINK\_before', 'None', 'Past'): 4,

         ('TLINK\_isIncluded', 'None', 'Past'): 3})

**Relation: Specialized Event -> General Event**

**Attribute: Pos**

Counter({('TLINK\_begunBy', 'Noun', 'Verb'): 13,

         ('TLINK\_simultaneous', 'Noun', 'Verb'): 115,

         ('TLINK\_overlap\_after', 'Noun', 'Pronoun'): 1,

         ('TLINK\_simultaneous', 'Adjective', 'Noun'): 12,

         ('TLINK\_after', 'Noun', 'Verb'): 28,

         ('TLINK\_simultaneous', 'Noun', 'Noun'): 77,

         ('TLINK\_identity', 'Noun', 'Verb'): 1,

         ('TLINK\_isIncluded', 'Noun', 'Noun'): 10,

         ('TLINK\_before', 'Noun', 'Noun'): 7,

         ('TLINK\_includes', 'Noun', 'Noun'): 35,

         ('TLINK\_identity', 'Noun', 'Noun'): 7,

         ('TLINK\_after', 'Noun', 'Noun'): 15,

         ('TLINK\_isIncluded', 'Noun', 'Verb'): 5,

         ('TLINK\_includes', 'Noun', 'Verb'): 9,

         ('TLINK\_before\_overlap', 'Noun', 'Verb'): 5,

         ('TLINK\_includes', 'None', 'Noun'): 2,

         ('TLINK\_before\_overlap', 'Noun', 'Noun'): 5,

         ('TLINK\_begunBy', 'Noun', 'Noun'): 4,

         ('TLINK\_simultaneous', 'None', 'Verb'): 2,

         ('TLINK\_begins', 'Noun', 'Noun'): 2,

         ('TLINK\_endedBy', 'Noun', 'Verb'): 1,

         ('TLINK\_simultaneous', 'Other', 'Verb'): 2,

         ('TLINK\_endedBy', 'Noun', 'Noun'): 1,

         ('TLINK\_overlap\_after', 'Adjective', 'Noun'): 1,

         ('TLINK\_overlap\_after', 'Noun', 'Verb'): 1,

         ('TLINK\_after', 'None', 'Noun'): 1,

         ('TLINK\_simultaneous', 'Adjective', 'Verb'): 1,

         ('TLINK\_before', 'Noun', 'Verb'): 5,

         ('TLINK\_simultaneous', 'None', 'Noun'): 1})

**Relation: Specialized Event -> General Event**

**Attribute: Polarity**

Counter({('TLINK\_begunBy', 'Pos', 'Pos'): 17,

         ('TLINK\_simultaneous', 'Pos', 'Pos'): 190,

         ('TLINK\_overlap\_after', 'Pos', 'Pos'): 2,

         ('TLINK\_after', 'Pos', 'Pos'): 40,

         ('TLINK\_identity', 'Pos', 'Pos'): 8,

         ('TLINK\_isIncluded', 'Pos', 'Pos'): 13,

         ('TLINK\_before', 'Pos', 'Pos'): 12,

         ('TLINK\_includes', 'Pos', 'Pos'): 43,

         ('TLINK\_simultaneous', 'Neg', 'Pos'): 14,

         ('TLINK\_before\_overlap', 'Pos', 'Pos'): 10,

         ('TLINK\_includes', 'None', 'Pos'): 2,

         ('TLINK\_simultaneous', 'None', 'Pos'): 5,

         ('TLINK\_includes', 'Neg', 'Pos'): 1,

         ('TLINK\_begins', 'Pos', 'Pos'): 2,

         ('TLINK\_endedBy', 'Pos', 'Pos'): 1,

         ('TLINK\_isIncluded', 'Neg', 'Pos'): 2,

         ('TLINK\_endedBy', 'Neg', 'Pos'): 1,

         ('TLINK\_overlap\_after', 'Neg', 'Pos'): 1,

         ('TLINK\_after', 'None', 'Pos'): 3,

         ('TLINK\_after', 'Neg', 'Pos'): 1,

         ('TLINK\_simultaneous', 'Neg', 'Neg'): 1})

**Relation: Specialized Event -> General Event**

**Attribute: Event Type**

Counter({('TLINK\_begunBy', 'None', 'Transition'): 13,

         ('TLINK\_simultaneous', 'None', 'State'): 70,

         ('TLINK\_simultaneous', 'None', 'Transition'): 36,

         ('TLINK\_overlap\_after', 'None', 'None'): 2,

         ('TLINK\_after', 'None', 'Transition'): 21,

         ('TLINK\_simultaneous', 'None', 'None'): 80,

         ('TLINK\_identity', 'None', 'Transition'): 1,

         ('TLINK\_isIncluded', 'None', 'None'): 10,

         ('TLINK\_before', 'None', 'None'): 7,

         ('TLINK\_simultaneous', 'None', 'Process'): 24,

         ('TLINK\_after', 'None', 'Process'): 2,

         ('TLINK\_includes', 'None', 'None'): 37,

         ('TLINK\_identity', 'None', 'None'): 7,

         ('TLINK\_after', 'None', 'None'): 16,

         ('TLINK\_isIncluded', 'None', 'State'): 3,

         ('TLINK\_after', 'None', 'State'): 5,

         ('TLINK\_includes', 'None', 'Transition'): 7,

         ('TLINK\_before\_overlap', 'None', 'Transition'): 1,

         ('TLINK\_before\_overlap', 'None', 'None'): 5,

         ('TLINK\_begunBy', 'None', 'None'): 4,

         ('TLINK\_before\_overlap', 'None', 'State'): 4,

         ('TLINK\_begins', 'None', 'None'): 2,

         ('TLINK\_endedBy', 'None', 'Transition'): 1,

         ('TLINK\_endedBy', 'None', 'None'): 1,

         ('TLINK\_overlap\_after', 'None', 'Process'): 1,

         ('TLINK\_includes', 'None', 'State'): 2,

         ('TLINK\_before', 'None', 'Transition'): 2,

         ('TLINK\_before', 'None', 'Process'): 1,

         ('TLINK\_before', 'None', 'State'): 2,

         ('TLINK\_isIncluded', 'None', 'Process'): 2})

**Relation: Specialized Event -> Specialized Event**

**Attribute: Class**

Counter({('TLINK\_simultaneous', 'None', 'None'): 412,

         ('TLINK\_isIncluded', 'None', 'None'): 134,

         ('TLINK\_before\_overlap', 'None', 'None'): 21,

         ('TLINK\_begunBy', 'None', 'Occurrence'): 14,

         ('TLINK\_simultaneous', 'None', 'State'): 112,

         ('TLINK\_before', 'None', 'Occurrence'): 7,

         ('TLINK\_simultaneous', 'None', 'Occurrence'): 76,

         ('TLINK\_overlap\_after', 'None', 'Occurrence'): 16,

         ('TLINK\_after', 'None', 'None'): 86,

         ('TLINK\_identity', 'None', 'None'): 246,

         ('TLINK\_overlap\_after', 'None', 'None'): 12,

         ('TLINK\_after', 'None', 'Occurrence'): 44,

         ('TLINK\_simultaneous', 'None', 'Reporting'): 2,

         ('TLINK\_isIncluded', 'None', 'Occurrence'): 27,

         ('TLINK\_isIncluded', 'I\_Action', 'None'): 12,

         ('TLINK\_after', 'I\_Action', 'None'): 17,

         ('TLINK\_identity', 'None', 'Occurrence'): 1,

         ('TLINK\_before', 'None', 'None'): 50,

         ('TLINK\_includes', 'None', 'None'): 74,

         ('TLINK\_includes', 'None', 'State'): 5,

         ('TLINK\_begunBy', 'None', 'None'): 12,

         ('TLINK\_after', 'None', 'State'): 42,

         ('TLINK\_isIncluded', 'None', 'State'): 7,

         ('TLINK\_after', 'None', 'Reporting'): 3,

         ('TLINK\_includes', 'None', 'Occurrence'): 7,

         ('TLINK\_before\_overlap', 'None', 'Occurrence'): 1,

         ('TLINK\_begins', 'None', 'None'): 18,

         ('TLINK\_before\_overlap', 'None', 'State'): 5,

         ('TLINK\_ends', 'None', 'None'): 2,

         ('TLINK\_begins', 'None', 'Occurrence'): 1,

         ('TLINK\_endedBy', 'None', 'Occurrence'): 1,

         ('TLINK\_includes', 'I\_Action', 'None'): 1,

         ('TLINK\_before', 'None', 'State'): 7,

         ('TLINK\_overlap\_after', 'None', 'State'): 4,

         ('TLINK\_endedBy', 'None', 'None'): 1,

         ('TLINK\_after', 'I\_State', 'None'): 1,

         ('TLINK\_during', 'None', 'None'): 10,

         ('TLINK\_overlap\_after', 'I\_Action', 'None'): 1,

         ('TLINK\_identity', 'None', 'State'): 1,

         ('TLINK\_during', 'None', 'Reporting'): 1})

**Relation: Specialized Event -> Specialized Event**

**Attribute: Pos**

Counter({('TLINK\_simultaneous', 'Noun', 'Noun'): 224,

         ('TLINK\_before\_overlap', 'Noun', 'Noun'): 11,

         ('TLINK\_isIncluded', 'Noun', 'Noun'): 57,

         ('TLINK\_identity', 'Noun', 'Pronoun'): 12,

         ('TLINK\_simultaneous', 'Adjective', 'Noun'): 27,

         ('TLINK\_identity', 'Noun', 'Noun'): 196,

         ('TLINK\_identity', 'Adjective', 'Noun'): 7,

         ('TLINK\_identity', 'None', 'Noun'): 8,

         ('TLINK\_after', 'Noun', 'Noun'): 38,

         ('TLINK\_before', 'None', 'Noun'): 1,

         ('TLINK\_overlap\_after', 'Noun', 'Noun'): 6,

         ('TLINK\_identity', 'Noun', 'Verb'): 1,

         ('TLINK\_begunBy', 'Noun', 'Noun'): 1,

         ('TLINK\_before', 'Noun', 'Noun'): 28,

         ('TLINK\_identity', 'Pronoun', 'Verb'): 1,

         ('TLINK\_identity', 'Adjective', 'Adjective'): 7,

         ('TLINK\_before', 'Adjective', 'Noun'): 4,

         ('TLINK\_includes', 'Noun', 'Noun'): 20,

         ('TLINK\_before\_overlap', 'Adjective', 'Noun'): 1,

         ('TLINK\_simultaneous', 'None', 'Noun'): 4,

         ('TLINK\_after', 'Adjective', 'Noun'): 2,

         ('TLINK\_includes', 'Adjective', 'Noun'): 1,

         ('TLINK\_identity', 'Noun', 'Preposition'): 1,

         ('TLINK\_identity', 'Noun', 'Other'): 1,

         ('TLINK\_simultaneous', 'Noun', 'Other'): 1,

         ('TLINK\_simultaneous', 'Noun', 'Verb'): 1,

         ('TLINK\_simultaneous', 'None', 'Verb'): 1,

         ('TLINK\_isIncluded', 'Noun', 'Pronoun'): 1,

         ('TLINK\_after', 'None', 'Noun'): 2,

         ('TLINK\_simultaneous', 'Adjective', 'Adjective'): 13})

**Relation: Specialized Event -> Specialized Event**

**Attribute: Polarity**

Counter({('TLINK\_simultaneous', 'Pos', 'Pos'): 236,

         ('TLINK\_before\_overlap', 'Pos', 'Pos'): 11,

         ('TLINK\_simultaneous', 'None', 'Pos'): 19,

         ('TLINK\_isIncluded', 'Pos', 'Pos'): 55,

         ('TLINK\_identity', 'Pos', 'Pos'): 213,

         ('TLINK\_identity', 'None', 'Pos'): 20,

         ('TLINK\_after', 'Pos', 'Pos'): 36,

         ('TLINK\_before', 'None', 'Pos'): 2,

         ('TLINK\_overlap\_after', 'Pos', 'Pos'): 6,

         ('TLINK\_begunBy', 'Pos', 'Pos'): 1,

         ('TLINK\_before', 'Pos', 'Pos'): 30,

         ('TLINK\_simultaneous', 'Neg', 'Pos'): 13,

         ('TLINK\_isIncluded', 'Neg', 'Pos'): 2,

         ('TLINK\_includes', 'Pos', 'Pos'): 19,

         ('TLINK\_after', 'Neg', 'Pos'): 4,

         ('TLINK\_before\_overlap', 'None', 'None'): 1,

         ('TLINK\_includes', 'Neg', 'Pos'): 2,

         ('TLINK\_isIncluded', 'None', 'Pos'): 1,

         ('TLINK\_identity', 'Neg', 'Pos'): 1,

         ('TLINK\_simultaneous', 'Neg', 'Neg'): 1,

         ('TLINK\_after', 'None', 'Pos'): 2,

         ('TLINK\_before', 'Neg', 'Pos'): 1,

         ('TLINK\_simultaneous', 'None', 'None'): 1,

         ('TLINK\_simultaneous', 'Neg', 'None'): 1})

**Relation: Specialized Event -> Specialized Event**

**Attribute: Specialized Class**

{('TLINK\_identity', 'Treatment', 'Treatment'): 70,

 ('TLINK\_identity', 'Personal History', 'Personal History'): 42,

 ('TLINK\_identity', 'Principal Diagnosis', 'Principal Diagnosis'): 36,

 ('TLINK\_simultaneous', 'Examination Result', 'Examination Result'): 35,

 ('TLINK\_simultaneous', 'Personal History', 'Personal History'): 34,

 ('TLINK\_simultaneous',

  'Characterization of the Disease',

  'Principal Diagnosis'): 31,

 ('TLINK\_simultaneous',

  'Characterization of the Disease',

  'Characterization of the Disease'): 31,

 ('TLINK\_simultaneous', 'Examination', 'Examination Result'): 30,

 ('TLINK\_simultaneous', 'Sign or Symptom', 'Sign or Symptom'): 27,

 ('TLINK\_identity',

  'Characterization of the Disease',

  'Characterization of the Disease'): 23,

 ('TLINK\_isIncluded', 'Treatment', 'Treatment'): 23,

 ('TLINK\_identity', 'Examination', 'Examination'): 19,

 ('TLINK\_after', 'Treatment', 'Treatment Response'): 10,

 ('TLINK\_includes', 'Treatment', 'Treatment'): 10,

 ('TLINK\_identity', 'Examination Result', 'Examination Result'): 9,

 ('TLINK\_simultaneous', 'Examination Result', 'Sign or Symptom'): 8,

 ('TLINK\_simultaneous', 'Characterization of the Disease', 'Intercurrence'): 8,

 ('TLINK\_before', 'Personal History', 'Personal History'): 8,

 ('TLINK\_simultaneous', 'Treatment', 'Treatment'): 7,

 ('TLINK\_identity', 'Sign or Symptom', 'Sign or Symptom'): 7,

 ('TLINK\_after', 'Examination', 'Examination Result'): 7,

 ('TLINK\_simultaneous', 'Treatment Response', 'Treatment Response'): 7,

 ('TLINK\_isIncluded', 'Intercurrence', 'Intercurrence'): 7,

 ('TLINK\_before\_overlap', 'Personal History', 'Personal History'): 6,

 ('TLINK\_identity', 'Intercurrence', 'Intercurrence'): 6,

 ('TLINK\_simultaneous', 'Examination', 'Examination'): 6,

 ('TLINK\_isIncluded', 'Examination', 'Examination'): 6,

 ('TLINK\_before', 'Characterization of the Disease', 'Personal History'): 5,

 ('TLINK\_simultaneous', 'Treatment', 'Treatment Response'): 4,

 ('TLINK\_identity', 'None', 'Treatment'): 4,

 ('TLINK\_isIncluded', 'Examination Result', 'Intercurrence'): 4,

 ('TLINK\_simultaneous', 'Intercurrence', 'Intercurrence'): 4,

 ('TLINK\_simultaneous', 'Drug Administration Route', 'Treatment'): 4,

 ('TLINK\_after', 'Examination', 'Treatment'): 4,

 ('TLINK\_simultaneous', 'Examination', 'Treatment Response'): 3,

 ('TLINK\_identity', 'Treatment Response', 'Treatment Response'): 3,

 ('TLINK\_before', 'Treatment', 'Treatment Response'): 3,

 ('TLINK\_before', 'Examination', 'Treatment'): 3,

 ('TLINK\_simultaneous',

  'Characterization of the Disease',

  'Personal History'): 3,

 ('TLINK\_identity', 'Medical Procedure', 'Medical Procedure'): 3,

 ('TLINK\_identity', 'Medical Procedure', 'Personal History'): 3,

 ('TLINK\_after', 'Personal History', 'Personal History'): 3,

 ('TLINK\_simultaneous', 'Examination', 'Personal History'): 3,

 ('TLINK\_simultaneous', 'Examination Result', 'Intercurrence'): 2,

 ('TLINK\_identity', 'Examination', 'Examination Result'): 2,

 ('TLINK\_after', 'Treatment Response', 'Treatment Response'): 2,

 ('TLINK\_after', 'Treatment', 'Treatment'): 2,

 ('TLINK\_simultaneous',

  'Characterization of the Disease',

  'Examination Result'): 2,

 ('TLINK\_isIncluded', 'Principal Diagnosis', 'Treatment'): 2,

 ('TLINK\_before', 'Treatment', 'Treatment'): 2,

 ('TLINK\_after', 'Intercurrence', 'Sign or Symptom'): 2,

 ('TLINK\_isIncluded', 'Personal History', 'Personal History'): 2,

 ('TLINK\_includes', 'Principal Diagnosis', 'Treatment Response'): 2,

 ('TLINK\_before\_overlap', 'Treatment', 'Treatment Response'): 2,

 ('TLINK\_includes', 'Treatment Response', 'Treatment Response'): 2,

 ('TLINK\_identity',

  'Characterization of the Disease',

  'Principal Diagnosis'): 2,

 ('TLINK\_simultaneous', 'Personal History', 'Sign or Symptom'): 2,

 ('TLINK\_isIncluded', 'Examination', 'Treatment'): 2,

 ('TLINK\_simultaneous', 'Intercurrence', 'Personal History'): 2,

 ('TLINK\_simultaneous', 'Sign or Symptom', 'Treatment Response'): 2,

 ('TLINK\_before', 'Examination', 'Examination Result'): 2,

 ('TLINK\_isIncluded', 'Characterization of the Disease', 'Intercurrence'): 2,

 ('TLINK\_simultaneous', 'Intercurrence', 'Treatment'): 2,

 ('TLINK\_after', 'Medical Procedure', 'Personal History'): 2,

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 ('TLINK\_isIncluded', 'Examination', 'Sign or Symptom'): 1,

 ('TLINK\_simultaneous', 'Examination', 'Medical Procedure'): 1,

 ('TLINK\_identity', 'Examination', 'Medical Procedure'): 1,

 ('TLINK\_before', 'None', 'Treatment Response'): 1,

 ('TLINK\_overlap\_after', 'Examination Result', 'Examination Result'): 1,

 ('TLINK\_simultaneous', 'Principal Diagnosis', 'Principal Diagnosis'): 1,

 ('TLINK\_begunBy', 'None', 'Principal Diagnosis'): 1,

 ('TLINK\_after', 'Characterization of the Disease', 'Personal History'): 1,

 ('TLINK\_includes', 'Principal Diagnosis', 'Principal Diagnosis'): 1,

 ('TLINK\_after', 'Medical Procedure', 'Treatment'): 1,

 ('TLINK\_before\_overlap', 'Drug Administration Route', 'Sign or Symptom'): 1,

 ('TLINK\_simultaneous', 'Characterization of the Disease', 'Examination'): 1,

 ('TLINK\_includes', 'Sign or Symptom', 'Treatment Response'): 1,

 ('TLINK\_isIncluded', 'Examination Result', 'Treatment'): 1,

 ('TLINK\_before', 'Intercurrence', 'Treatment Response'): 1,

 ('TLINK\_overlap\_after', 'Personal History', 'Personal History'): 1,

 ('TLINK\_includes', 'Personal History', 'Personal History'): 1,

 ('TLINK\_includes', 'Treatment', 'Treatment Response'): 1,

 ('TLINK\_isIncluded', 'Principal Diagnosis', 'Treatment Response'): 1,

 ('TLINK\_overlap\_after', 'Treatment', 'Treatment'): 1,

 ('TLINK\_includes', 'Principal Diagnosis', 'Treatment'): 1,

 ('TLINK\_after', 'Intercurrence', 'Intercurrence'): 1,

 ('TLINK\_overlap\_after', 'Intercurrence', 'Treatment Response'): 1,

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  'Characterization of the Disease',

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 ('TLINK\_before', 'Examination Result', 'Treatment'): 1,

 ('TLINK\_isIncluded', 'Principal Diagnosis', 'Sign or Symptom'): 1,

 ('TLINK\_includes', 'Personal History', 'Principal Diagnosis'): 1,

 ('TLINK\_before', 'Principal Diagnosis', 'Principal Diagnosis'): 1,

 ('TLINK\_before\_overlap', 'Examination', 'Examination Result'): 1,

 ('TLINK\_after', 'Examination Result', 'Treatment Response'): 1,

 ('TLINK\_before\_overlap', 'Examination Result', 'Examination Result'): 1,

 ('TLINK\_simultaneous', 'Principal Diagnosis', 'Treatment Response'): 1,

 ('TLINK\_before', 'Personal History', 'Treatment'): 1,

 ('TLINK\_simultaneous', 'Personal History', 'Treatment'): 1,

 ('TLINK\_isIncluded', 'Personal History', 'Treatment'): 1,

 ('TLINK\_overlap\_after', 'Examination', 'Sign or Symptom'): 1,

 ('TLINK\_simultaneous', 'Examination Result', 'Principal Diagnosis'): 1,

 ('TLINK\_simultaneous', 'Intercurrence', 'Sign or Symptom'): 1,

 ('TLINK\_isIncluded', 'Examination', 'Intercurrence'): 1,

 ('TLINK\_before', 'Sign or Symptom', 'Treatment Response'): 1,

 ('TLINK\_after', 'Sign or Symptom', 'Sign or Symptom'): 1,

 ('TLINK\_before', 'Intercurrence', 'Treatment'): 1,

 ('TLINK\_simultaneous', 'Sign or Symptom', 'Treatment'): 1,

 ('TLINK\_overlap\_after', 'Personal History', 'Sign or Symptom'): 1,

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  'Characterization of the Disease',

  'Examination Result'): 1,

 ('TLINK\_before', 'Examination', 'Principal Diagnosis'): 1,

 ('TLINK\_before', 'Examination Result', 'Intercurrence'): 1,

 ('TLINK\_after', 'Examination', 'Treatment Response'): 1,

 ('TLINK\_after', 'Examination Result', 'Intercurrence'): 1,

 ('TLINK\_identity', 'Examination', 'Treatment Response'): 1,

 ('TLINK\_identity', 'Examination Result', 'Treatment Response'): 1,

 ('TLINK\_simultaneous', 'Intercurrence', 'None'): 1,

 ('TLINK\_after', 'Examination', 'Intercurrence'): 1,

 ('TLINK\_before\_overlap',

  'Characterization of the Disease',

  'Personal History'): 1,

 ('TLINK\_simultaneous', 'Medical Procedure', 'Personal History'): 1,

 ('TLINK\_before', 'Medical Procedure', 'Medical Procedure'): 1,

 ('TLINK\_after', 'Examination', 'Sign or Symptom'): 1,

 ('TLINK\_simultaneous', 'Examination Result', 'Medical Procedure'): 1,

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  'Characterization of the Disease',

  'Treatment Response'): 1,

 ('TLINK\_simultaneous',

  'Characterization of the Disease',

  'Treatment Response'): 1,

 ('TLINK\_identity', 'Examination', 'Treatment'): 1,

 ('TLINK\_isIncluded',

  'Characterization of the Disease',

  'Treatment Response'): 1,

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 ('TLINK\_simultaneous', 'Examination', 'Intercurrence'): 1}