## APPENDIX 1

Table A1.1 Definitions of Presentational Relations

<table>
<thead>
<tr>
<th>Relation Name</th>
<th>Constraints on either S or N individually</th>
<th>Constraints on N + S</th>
<th>Intention of W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antithesis</td>
<td>on N: W has positive regard for N</td>
<td>N and S are in contrast (see the Contrast relation); because of the incompatibility that arises from the contrast, one cannot have positive regard for both of those situations; comprehending S and the incompatibility between the situations increases R's positive regard for N</td>
<td>R's positive regard for N is increased</td>
</tr>
<tr>
<td>Background</td>
<td>on N: R won't comprehend N sufficiently before reading text of S</td>
<td>S increases the ability of R to comprehend an element in N</td>
<td>R's ability to comprehend N increases</td>
</tr>
<tr>
<td>Concession</td>
<td>on N: W has positive regard for N on S: W is not claiming that S does not hold;</td>
<td>W acknowledges a potential or apparent incompatibility between N and S; recognizing the compatibility between N and S increases R's positive regard for N</td>
<td>R's positive regard for N is increased</td>
</tr>
<tr>
<td>Enablement</td>
<td>on N: presents an action by R (including accepting an offer), unrealized with respect to the context of N</td>
<td>R comprehending S increases R's potential ability to perform the action in N</td>
<td>R's potential ability to perform the action in N increases</td>
</tr>
<tr>
<td>Evidence</td>
<td>on N: R might not believe N to a degree satisfactory to W on S: R believes S or will find it credible</td>
<td>R's comprehending S increases R's belief of N</td>
<td>R's belief of N is increased</td>
</tr>
<tr>
<td>Justify</td>
<td>none</td>
<td>R's comprehending S increases R's readiness to accept W's right to present N</td>
<td>R's readiness to accept W's right to present N is increased</td>
</tr>
<tr>
<td>Motivation</td>
<td>on N: N is an action in which R is the actor (including accepting an offer), unrealized with respect to the context of N</td>
<td>Comprehending S increases R's desire to perform action in N</td>
<td>R's desire to perform action in N is increased</td>
</tr>
<tr>
<td>Preparation</td>
<td>none</td>
<td>S precedes N in the text; S tends to make R more ready, interested or oriented for reading N</td>
<td>R is more ready, interested or oriented for reading N</td>
</tr>
<tr>
<td>Restatement</td>
<td>none</td>
<td>on N + S: S restates N, where S and N are of comparable bulk; N is more central to W's purposes than S is.</td>
<td>R recognizes S as a restatement of N</td>
</tr>
<tr>
<td>Summary</td>
<td>on N: N must be more than one unit</td>
<td>S presents a restatement of the content of N, that is shorter in bulk</td>
<td>R recognizes S as a shorter restatement of N</td>
</tr>
</tbody>
</table>
### Table A1.2 Definitions of Subject Matter Relations

<table>
<thead>
<tr>
<th>Relation Name</th>
<th>Constraints on either S or N individually</th>
<th>Constraints on N + S</th>
<th>Intention of W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circumstance</td>
<td>on S: S is not unrealized</td>
<td>S sets a framework in the subject matter within which R is intended to interpret N</td>
<td>R recognizes that S provides the framework for interpreting N</td>
</tr>
<tr>
<td></td>
<td>on S: S presents a hypothetical, future, or otherwise unrealized situation (relative to the situational context of S)</td>
<td>Realization of N depends on realization of S</td>
<td>R recognizes how the realization of N depends on the realization of S</td>
</tr>
<tr>
<td>Condition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elaboration</td>
<td>none</td>
<td>S presents additional detail about the situation or some element of subject matter which is presented in N or inferentially accessible in N in one or more of the ways listed below. In the list, if N presents the first member of any pair, then S includes the second: set :: member, abstraction :: instance, whole :: part, process :: step, object :: attribute, generalization :: specific</td>
<td>R recognizes S as providing additional detail for N. R identifies the element of subject matter for which detail is provided.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>none</td>
<td>on N + S: S relates N to degree of W’s positive regard toward N.</td>
<td>R recognizes that S assesses N and recognizes the value it assigns</td>
</tr>
<tr>
<td>Interpretation</td>
<td>none</td>
<td>on N + S: S relates N to a framework of ideas not involved in N itself and not concerned with W’s positive regard</td>
<td>R recognizes that S relates N to a framework of ideas not involved in the knowledge presented in N itself</td>
</tr>
<tr>
<td>Means</td>
<td>on N: an activity</td>
<td>S presents a method or instrument which tends to make realization of N more likely</td>
<td>R recognizes that the method or instrument in S tends to make realization of N more likely</td>
</tr>
<tr>
<td>Non-volitional Cause</td>
<td>on N: N is not a volitional action</td>
<td>S, by means other than motivating a volitional action, caused N; without the presentation of S, R might not know the particular cause of the situation; a presentation of N is more central than S to W’s purposes in putting forth the N-S combination.</td>
<td>R recognizes S as a cause of N</td>
</tr>
<tr>
<td>Non-volitional Result</td>
<td>on S: S is not a volitional action</td>
<td>N caused S; presentation of N is more central to W’s purposes in putting forth the N-S combination than is the presentation of S.</td>
<td>R recognizes that N could have caused the situation in S</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Otherwise</td>
<td>on N: N is an unrealized situation on S: S is an unrealized situation</td>
<td>realization of N prevents realization of S</td>
<td>R recognizes the dependency relation of prevention between the realization of N and the realization of S</td>
</tr>
<tr>
<td>Purpose</td>
<td>on N: N is an activity; on S: S is a situation that is unrealized</td>
<td>S is to be realized through the activity in N</td>
<td>R recognizes that the activity in N is initiated in order to realize S</td>
</tr>
<tr>
<td>Solutionhood</td>
<td>on S: S presents a problem</td>
<td>N is a solution to the problem presented in S;</td>
<td>R recognizes N as a solution to the problem presented in S</td>
</tr>
<tr>
<td>Unconditional</td>
<td>on S: S conceivably could affect the realization of N</td>
<td>N does not depend on S</td>
<td>R recognizes that N does not depend on S</td>
</tr>
<tr>
<td>Unless</td>
<td>none</td>
<td>S affects the realization of N; N is realized provided that S is not realized</td>
<td>R recognizes that N is realized provided that S is not realized</td>
</tr>
<tr>
<td>Volitional Cause</td>
<td>on N: N is a volitional action or else a situation that could have arisen from a volitional action</td>
<td>S could have caused the agent of the volitional action in N to perform that action; without the presentation of S, R might not regard the action as motivated or know the particular motivation; N is more central to W’s purposes in putting forth the N-S combination than S is.</td>
<td>R recognizes S as a cause for the volitional action in N</td>
</tr>
<tr>
<td>Volitional Result</td>
<td>on S: S is a volitional action or a situation that could have arisen from a volitional action</td>
<td>N could have caused S; presentation of N is more central to W’s purposes than is presentation of S;</td>
<td>R recognizes that N could be a cause for the action or situation in S</td>
</tr>
</tbody>
</table>
Table A1.3 Definitions of Multinuclear Relations

<table>
<thead>
<tr>
<th>Relation Name</th>
<th>Constraints on each pair of N</th>
<th>Intention of W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conjunction</td>
<td>The items are conjoined to form a unit in which each item plays a comparable role</td>
<td>R recognizes that the linked items are conjoined</td>
</tr>
<tr>
<td>Contrast</td>
<td>No more than two nuclei; the situations in these two nuclei are (a) comprehended as the same in many respects (b) comprehended as differing in a few respects and (c) compared with respect to one or more of these differences</td>
<td>R recognizes the comparability and the difference(s) yielded by the comparison is being made</td>
</tr>
<tr>
<td>Disjunction</td>
<td>An item presents a (not necessarily exclusive) alternative for the other(s)</td>
<td>R recognizes that the linked items are alternatives</td>
</tr>
<tr>
<td>Joint</td>
<td>None</td>
<td>none</td>
</tr>
<tr>
<td>List</td>
<td>An item comparable to others linked to it by the List relation</td>
<td>R recognizes the comparability of linked items</td>
</tr>
<tr>
<td>Multinuclear Restatement</td>
<td>An item is primarily a reexpression of one linked to it; the items are of comparable importance to the purposes of W</td>
<td>R recognizes the reexpression by the linked items</td>
</tr>
<tr>
<td>Sequence</td>
<td>There is a succession relationship between the situations in the nuclei</td>
<td>R recognizes the succession relationships among the nuclei.</td>
</tr>
</tbody>
</table>
APPENDIX 2

TOURISM DOMAIN QUERIES

This chapter consists of a list of queries in Tamil that were used to evaluate the CoReX UNL Indexer along with their transliteration and translation in English.

1. தேரியில் திருநோய் முன்னை மான்றத்திற்கு மறிய

   தேரியில் திருநோய் முன்னை மான்றத்திற்கு மறிய

   Night-time three-star hotel in Delhi

2. கும்பாமேலா

   Kumpamēḻai

   Kumbamela

3. வாரணாசி பாடுராய

   Vāraṇāsī paṭiturai

   Varanasi ghat

4. உமாசங்கால் பிரசுத்தக்லிந்த அருமை

   Umācakalā piratcattin alaku

   The beauty of Himachal Pradesh

5. குஜாராத் கிருட்டல் தாரிகா

   Kujaṟattinā cūṟulē tāḷāṅkā

   Gujarat’s tourist attractions

6. புச்கர் மேலா

   Puṣkar mēḻā

   Pushkar Mela
7. Popular Temples of South India

8. Pilgrimage to vaisnavatevi

9. Kacauli's Attraction

10. Attractive places of Diu and Dama

11. Allahabad's Tourist Spots

12. Holy places in Dwarka

13. Bangalore

14. Leha Ladakh
15. Beautiful and exotic Dehradun
   Alakāṇa kavarcciyāṇa teharāṭīṇa

16. Sabarmati Ashram in Allahabad
   Alakāpatṭin caparmati āciramam

17. Ujjaini’s tourist attractions
   UjjeyṆiyēn cūrulā talaṅkaḷ

18. Kamākyē tēvi kōyil
   Kamakya Devi Temple

19. Madhya Pradesh’s tourist attractions
   Mattiya pirāṭcattin cūrulā talaṅkaḷ

20. Nalanda in Bihar visvavityalaiyē
    Pikārīl nāḻaṅkē visvavityēlaiyē

21. Queen of Hills Mussoorie
    Malaikāliṅ rāṇi mucūrī

22. Madhya Pradesh’s Mandu City tour
    Mattiya pirāṭcē māṇtu nakara payaṇam
23. உதாப்புர் குழுவல் குழுவல்
   Utaippūr currulā talankal
   Tourist attractions in Udaipur

24. ராஜாஸ்தானின் சமவெளி குறிப்பிட்டு
   Rajastānil camara kōyilkal
   Jain temples in Rajasthan

25. ஸ்ரிநாதியின் குறிப்பிட்டு
   Srīnāṭji kōyil
   Shrinathji Temple

26. சித்தோர்கோட்டை குறிப்பிட்டு
   Cittōrkar kōṭṭai
   Chittorgarh Fort

27. பிகாந்தூர்கு பாயணம்
   Pikāṉērūkku payaṇam
   Travel to Bikaner

28. ராஜாஸ்தானின் ஆல்வர் நாகரம்
   Rajastānil alvār nakaram
   Rajasthan's Alwar city

29. நந்தா மலைப் பயணம்
   Nantā tēvi malai pirayaṇam
   Nanda Devi mountain voyage

30. சீதாநாயகம்
   Cirāṭi taricaṇām
   Visit to Cirati
31. Tenkäciyil uḷḷa kurrāla aruvi
Kutralam falls in Thenkasi

32. Tiruvaṇṇāmalai anṇāmalaiyār kōyil
Lord Shiva Temple in Tiruvannamalai

33. Tiruccentür arulmiku cupramanìya cuvāmi tirukkōvīl
Tiruchendur Sri Subramanya Swamy Temple

34. Arulmiku manakkula vināyakar tirukkōyil pānticcōri
Arunmiku Manakula Vinayagar Temple in Pondichery

35. Karikālan kaṭṭiya kallanāi
Kallanai built by Kairkalan

36. Kītī tēciya pūṅkā
Guindy National Park

37. Cāntōm tēvālayam
Santhome Church

38. Anaimuṭi malai
Anaimuṭi Mountain
39. ஆர்த்தநாரின் சவாரா கிள்ளகிசா யில்
Arttanārāsvaṉar tirukkōṭi
Ardhamāreswar Temple

40. அர்஦்ஹாநாரின் அனுமானா கிள்ளகிசா யில்
Aruḷmiku aśṭalakṣumī tirukkōṭi pecaṇṭ nakar
Sri Ashtalakshmi Temple Besant Nagar

41. திருவல்குனிகாசின் பார்த்தார்த்திய புருநாதன் கிள்ளகிசா யில்
Tiruvallikkēṉi pāṛttaçārati perumāl kōṭil
Triplicane Parthasarathy Perumal Temple

42. பகவதியின் ஆம்மா கிள்ளகிசா யில் பாண்ட்யாக்காளே
Pakavati am'man tirukkōṭi maṇṭaikkāṭu
Bhagavathy Amman Temple mantaikkatu

43. தஞ்சை ப்ரியா கிள்ளகிசா யில்
Tāṇcai periyak kōṭil
Tanjore Periya Temple

44. கஞ்சிபுரம் வரதாராஜ புருநாதன் கிள்ளகிசா யில்
Kāncipuram varadāraja perumāl kōṭil
Kanchipuram Varadaraja Perumal Temple

45. கஞ்சிகளாசனார் கிள்ளகிசா யில்
Kāṇci kailācanāṭar kōṭil
Kanchi Kaishnathar Temple

46. திருநாள்நாட்டு கௌசம்பவன் கிள்ளகிசா யில்
Tirunallāṉu caṇṭsvaran kōṭil
Thirunallar Shaneswaran Temple

47. திருப்பதி வெங்கடாசலபாதி கிள்ளகிசா யில்
Tiruppati venkatāccalapāṭi kōṭil
Thirupathi Venkatachalapathi Temple
48. Parampikkuḷam குளம்
Parampikkulam குளம்
Parampikkulam River

49. Konarkcuṟiyangar kōyil
Konark ā्cyanār kōyil
Konark Sun Temple

50. Camayapuram māriyam'naṅ kōyil
Camayapuram māriyam'naṅ kōyil
Samayapuram Mariamman Temple

51. Nāmakkal āngancōyar kōvil
Nāmakkal āngancōyar kōvil
Namakkal Anchaneyar Temple

52. AdiKēsava perumāl kōvil
AdiKēsava perumāl kōvil
AdiKēsava Perumal Temple

53. Kūrṟāḷa nātar kōvil
Kūrṟāḷa nātar kōvil
Kutrala Nathar Kovil

54. Nāmakkal māvattil uṟṟa kolli malai
The kolli mountain in Namakkal district

55. Tirunākēsvaram tiruttalam kumpakōṟam
Thirunageswaram Temple Kumbakonam

56. Citamparam civaṅ kōvil
Chidambaram Shiva Temple
57. கோவாலம் காட்கரை
Kovalam kaṭarkarai
Kovalam Beach

58. குற்றால அருவி
Kurṭṭāla aruvi
Kutram Falls

59. எலைகளின் வட்ட கருவற
Elaikaling uṭti ērkātu
Poorman's Ooty Yercaud

60. கால்லாகர் கோயில்
Kallalakar kōyil
Kallalakar Temple

61. இந்தியாவின் அருக் அருள்மிகளின் கிலாக்களா
Intiyāṇi aracu arunāciyakankaḷ
India's state museums

62. காஞ்சை கொட்டாரம் சோபாபுரம்
Kāṅkai korta cōlapuram
Gangai Konda cholapuram

63. ஹோகேநக்கள் அருவி
Okēnakkal aruvi
Hogenakkal Falls

64. முதுமாலை வண்ண விலங்குகள் காப்பாகம்
Mutumalai vaṇa vilāṅkukal caranālayam
Mudumalai Wildlife Sanctuary

65. பழவேர்க்கூட பார்வைகள் கப்பாகம்
Pazhāverkkāṭu pāravaikkal kāppakam
Pazhaverkadu Bird Sanctuary
66.  பாதுக்கோட்டை அருகில் மான்னார்
Pattukottai arukūḷa maṅnār
Manorai near Pattukottai

67.  சித்தான்வேல் குகைகள் கல்வெடு
Cittanavēkal kukaik kalvēṭu
Sittanavasal cave inscription

68.  வெள்ளியாங்கிரி மலை
Velliyankiri malai
Velliyangiri Mountain

69.  பொல்லாங்கிரி அருகில் மலை அலியாறு ஆபாய
Pollāci arukūḷa aliyāṟu aṇai
Aliyar dam near Pollachi

70.  தேலி குருலா தலாய்கள்
Tēlli curgula talainkal
Delhi Tourism Sites

71.  தால் கரி
Tāl kari
Dal Lake

72.  இந்திரகாந்தியாக் தேசிய பூங்கா
Indirakānti tēciyap pūṅkā
Indira Gandhi National Park

73.  அரஞா அருங்காட்சியகம் சேர்த்து விளக்கம
Aracu arukāciyakam cenpāi
Government Museum in Chennai

74.  விவேகாணநாதன் நினைவு மான்பாம்
Vivekāntar niṇṇaiu maṉāpam
Vivekananda Memorial
75. **Taj Mahal in Agra**

76. **Arokiya Madha pilgrimage Velankanni**

77. **Kashi Vishwanath Temple**

78. **Satpura Range**

79. **Ajanta Cave Painting**

80. **Monument in Hampi**

81. **City That does not sleep**

82. **Tirunelveli**
APPENDIX 3

The influence scores of all the RST discourse relations and saṅgatis considered by the UNL-RST-saṅgati discourse parser is listed in Table A 3.1

Table A3.1 Influence scores

<table>
<thead>
<tr>
<th>Discourse Relation/ saṅgati</th>
<th>Influence Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>upajīvya</td>
<td>0.01</td>
</tr>
<tr>
<td>uttāna</td>
<td>0.02</td>
</tr>
<tr>
<td>ātidesīka</td>
<td>0.01</td>
</tr>
<tr>
<td>anantara</td>
<td>0.125</td>
</tr>
<tr>
<td>vīseśa</td>
<td>0.015</td>
</tr>
<tr>
<td>prāsaṅgika</td>
<td>0.075</td>
</tr>
<tr>
<td>upodghāta</td>
<td>0.005</td>
</tr>
<tr>
<td>ċṛṣṭanta</td>
<td>0.01</td>
</tr>
<tr>
<td>Condition</td>
<td>0.015</td>
</tr>
<tr>
<td>Circumstance</td>
<td>0.025</td>
</tr>
<tr>
<td>Evaluation</td>
<td>0.01</td>
</tr>
<tr>
<td>Cause and Effect</td>
<td>0.01</td>
</tr>
<tr>
<td>Antithesis</td>
<td>0.02</td>
</tr>
<tr>
<td>Joint</td>
<td>0.045</td>
</tr>
<tr>
<td>Elaboration</td>
<td>0.2</td>
</tr>
<tr>
<td>Purpose</td>
<td>0.045</td>
</tr>
<tr>
<td>Cause</td>
<td>0.015</td>
</tr>
<tr>
<td>Sequence</td>
<td>0.125</td>
</tr>
<tr>
<td>Means</td>
<td>0.025</td>
</tr>
<tr>
<td>List</td>
<td>0.15</td>
</tr>
<tr>
<td>Back Ground</td>
<td>0.025</td>
</tr>
<tr>
<td>Result</td>
<td>0.02</td>
</tr>
</tbody>
</table>