

Время выполнения задания – 180 мин., язык - английский.

Linguistic Theory and Language Description
Three hours, solutions in English

Task 1. Swatchers

In a small Asian country, the span of, and the access to, the internet is state-controlled and very limited. There are only four web pages, \aleph , \beth , γ and ∞ , which may cross-reference each other but do not lead outside to the web. \aleph only links to \beth , \beth only links to γ . Web page ∞ only links to itself. γ , however, contains as many as two different links. One brings you to \aleph , the other brings you to ∞ .

A user turns on her computer and is randomly brought to one of these web pages, with equal probabilities. After reading the page, she follows one of the links on the web page (again with equal probabilities in case there are more than one).

- What is the probability of her getting to \aleph after one click?
- What is the probability of her getting to \beth after three clicks?
- Prove that, sooner or later, she gets to ∞ (never to leave it)

Task 2. The beginning of the armadillos is the end of the jaguars

(Inspired by Kipling 1900 and Dixon 1998, adapted from Merrifield et al. 2003 with minimal changes)

*I'd like to roll to Rio,
Some day before I'm old.*

RK

Consider the following sentences in language C and their translations. Based on their analysis, provide:

(a) an exhaustive list of morphological glosses for language C (the glosses should be given as pairs consisting of the formal exponent and its grammatical meaning)

(b) a typologically informed description of coding core arguments (AKA grammatical relations)

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| 1. \tilde{f} <i>bĩtsã tsakakĩ</i> | 'My brother shoots it.' |
| 2. \tilde{f} <i>bĩtsã isu haida tsakakĩ</i> | 'My brother shoots many spider monkeys.' |
| 3. \tilde{f} <i>bĩtsã piawĩ isu tsakakĩ</i> | 'My brother shoots spider monkey with arrows.' |
| 4. \tilde{f} <i>isu tsakai kaşũ</i> | 'I hunted (went shooting) spider monkey.' |

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5. <i>miarã ã ùĩşũ</i>	'I saw you.'
6. <i>habu butukĩ</i>	'He goes down.'
7. <i>mĩ kaşũ</i>	'You went.'
8. <i>ĩ bitsã hasĩ ùĩkĩ</i>	'My brother sees wild turkey.'
9. <i>haarã hafiwĩ ãnã imawawaşũ</i>	'Mine killed him with a spear.'
10. <i>hasĩ ã bitsa ùĩkĩ</i>	'A wild turkey sees my brother.'
11. <i>hasĩ kufi kakĩ</i>	'A wild turkey goes fast (runs).'
12. <i>ĩ bitsã tsakabãĩkĩ</i>	'My brother shoots it, going along.'
13. <i>kumã isu iwopa ùĩşũ</i>	'The partridge saw a big spider monkey.'
14. <i>hunĩ isu iwopa haida ùĩşũ</i>	'The man saw a very big spider monkey.'
15. <i>kuma haidã huni ùĩnũ</i>	'Many partridges will see the man.'
16. <i>ĩ kuka yefã tsakai kanũ</i>	'My father-in-law will hunt (go shooting) armadillo.'
17. <i>yefã ã kukã ùĩkĩ</i>	'My father-in-law sees armadillo.'
18. <i>ĩ kuka pipã isu ùĩşũ</i>	'My good father-in-law saw a spider monkey.'
19. <i>ĩ tfe haidã tsakabubuşũ</i>	'My many brothers-in-law shot it from place to place.'
20. <i>ĩ isu pi pişupiřta ùĩ kanũ</i>	'I'll go seeing a small spider monkey.'
21. <i>hĩsĩsã ã ùĩbãĩkĩ</i>	'Going along I see ants.'
22. <i>ĩ isu řita ùĩnũ</i>	'I'll see spider monkey teeth.'
23. <i>habũna tsakabubui kakĩ</i>	'His hunts them from place to place.'
24. <i>isu kurũ mĩna ùĩşũ</i>	'The grey spider monkey saw yours.'
25. <i>habũ bitsã ã kuma haida ùĩşũ</i>	'His brother saw my many partridges.'
26. <i>mĩ kukã isu řita ùĩşũ</i>	'Your father-in-law saw spider monkey teeth.'
27. <i>kuma iwopa haida kufi kanũ</i>	'The very big partridge will run.'
28. <i>ĩ isu bisu ùĩkĩ</i>	'I see a spider monkey face.'
29. <i>isu iwopa haidã pia ùĩnũ</i>	'A very big spider monkey will see the arrows.'
30. <i>hunirã pia haidawĩ ã tsakakĩ</i>	'I shoot men with many arrows.'

31. <i>kawi</i>	'Go!'
32. <i>ĩ bitsarã ĩ des pĩpã ũĩnũ</i>	'My good nephew will see my brother.'
33. <i>Iarã ĩ bitsã ũĩkĩ</i>	'My brother sees me.'
34. <i>mĩnã hasĩ pii bitĩkĩ</i>	'Yours wants wild turkey feathers.'
35. <i>tsakai kawi</i>	'Hunt!'
36. <i>habũ isurã ĩnã ũĩkĩ</i>	'Mine sees his spider monkey.'
37. <i>isu imawawai inawi</i>	'Go up killing monkey!'
38. <i>ĩnarã habũ isũ bitĩbãĩnũ</i>	'His spider monkey will want mine going along.'
39. <i>ĩna tsakawi</i>	'Shoot mine!'
40. <i>isu mĩkĩnã huni haidã ũĩkĩ</i>	'Many men see a monkey hand.'
41. <i>niwi</i>	'Walk!'
42. <i>hasĩ batfirã habũ bitĩkĩ</i>	'He wants wild turkey eggs.'
43. <i>habũnã mia ũĩbubunũ</i>	'His will see you from place to place.'
44. <i>kufi butuwi</i>	'Go down fast!'
45. <i>huni iwopã nifi bitĩkĩ</i>	'The big man wants a rope.'
46. <i>haa imawawawi</i>	'Kill him!'
47. <i>hĩsĩs haida inakãĩšũ</i>	'Many ants ascended going along.'
48. <i>habũ kukã hafĩ ũĩbãĩšũ</i>	'His father-in-law saw the spear going along.'
49. <i>inawi</i>	'Go up!'
50. <i>tfe pĩpa kakukukĩ</i>	'Good brothers-in-law go from place to place.'
51. <i>mĩ tfe pĩpa haida kufi kakukušũ</i>	'Your very good brother-in-law ran from place to place.'
52. <i>yef bitĩwi</i>	'Want armadillo!'
53. <i>ĩ hasĩ batfi bitĩnũ</i>	'I'll want wild turkey eggs.'
54. <i>mĩna tsakai kašũ</i>	'Yours hunted it.'
55. <i>ũĩĩ butuwi</i>	'Seeing go down!'
56. <i>habũ kuka pĩpa kufi butunũ</i>	'His good father-in-law will descend fast.'

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57. *ĩ kukã kuma pii bitfişũ* 'My father-in-law wanted partridge feathers.'
58. *binurã ĩ bitfişũ* 'I wanted a club.'
59. *ĩ imawawai kaşũ* 'I went killing it.'
60. *habu kufi nikukuşũ* 'He walked fast from place to place.'
61. *hafĩ inu imawawaşũ* 'The spear killed the jaguar.'
62. *hasĩnã ĩ bitsa pipa haidã ũĩkĩ* 'My very good brother sees a wild turkey.'
63. *ĩ bitsa ĩ isu pişupifita ũĩĩ inaşũ* 'My brother, seeing my small spider monkey, went up.'
64. *habũ dẽs pia haidawĩ isu tsakaşũ* 'His nephew shot spider monkeys with many arrows.'
65. *mĩ kuma iwopa haidã haa ũĩkĩ* 'Your very big partridge sees him.'
66. *habũ binuwĩ imawawabãĩkĩ* 'He going along kills with a club.'
67. *kumarã habũ binuwĩ ĩ imawawanũ* 'I'll kill partridge with his club.'
68. *huni iwopa haidarã kuma iwopã ũĩşũ* 'The big partridge saw the very big man.'
69. *habũ habũ isu pişupifita haida tsakaşũ* 'He shot his very small spider monkey.'
70. *mĩ bitsa isu kũĩ bitfibãĩni butukĩ* 'Your brother, going along wanting real monkeys, descends.'
71. *isurã ĩ pia haidawĩ ĩ tsakai inakĩ* 'I, shooting a spider monkey with my many arrows, go up.'
72. *hasĩ haidarã hĩsĩs bitfi butukukuşũ* 'The ants wanting many wild turkeys went down from place to place.'
73. *mĩnarã piawĩ habu imawawabãĩni kakĩ* 'He, going along killing yours with arrows, goes.'
74. *habũ isu pişupifitarã ĩ pia haidã imawawakĩ* 'My many arrows kill his small spider monkey.'
75. *ĩ bitsã pia iwopa haidawĩ kuma tsakabãĩkĩ* 'My brother going along shoots a partridge with a very big arrow.'
76. *mĩ isu kũĩ ĩ nifi kũĩwĩ habũna imawawanũ* 'Your real monkey will kill his with my real rope.'
77. *ĩ tfe haidã hafĩ iwopawĩ inu imawawabãĩşũ* 'My many brothers-in-law going along killed a jaguar with a big spear.'

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78. *inũ habũ ŝitawĩ huni piŝupifita imawawakĩ* 'The jaguar kills the small man with his teeth.'
79. *huni habũ binu iwopa haidawĩ yef* 'The man will walk going along,
imawawai nikãĩnũ killing armadillo with his very big club.'
80. *mĩ isu haidarã ẽ pia iwopawĩ ẽ tsakabubui kanũ* 'I'll hunt your many spider monkeys from place
to place with my big arrows.'
81. *yefã hafĩ iwopawĩ habu imawawai imakukunũ* 'He, killing armadillo with a big
spear, will go up from place to place.'
82. *isu kũĩnã habũ ŝitawĩ inu iwopa haidã* 'The very big jaguar kills real
imawawabubukĩ monkeys with his teeth from place to place.'
83. *ẽ ẽ binu haidawĩ mĩ yef imawawai nikĩ* 'I walk killing your armadillo with my
many clubs.'
84. *ẽ isu piŝupifita haidarã binu piŝupifita haidawĩ* 'You kill my very small spider
mĩ imawawakĩ monkey with a very small club.'
85. *habũnarã mĩ binu iwopa haidawĩ mĩ imawawaŝũ* 'You killed his with your very big club.'