

Lign 120 - Spring 2008 - Ackerman

## **Final Exam**

**Exams are due by 10 in the morning on Thursday  
June 11<sup>th</sup>**

Please collect all of your answers to each problem set on a separate sheet of paper, since this will facilitate grading.

Though interaction was encouraged for the homeworks, you should not be consulting with other class members about any aspect of the final. Cheating from any source will require disciplinary action.

Exams can be turned in to my office: I will be in my office on Thursday morning to receive them. If you come earlier than Thursday and I am not in my office, then slide it under the door. You can also send exams via email, in pdf format.

## Question 1: Part 1

Note: Since this is large data set, it will be crucial to organize your observations and hypotheses as suggested below.

1. In this data there are allomorphs for certain morphosyntactic categories, among them the infinitival marker. There are 3 infinitival allomorphs. In order to identify them you will have to make assumptions about the structure of (classes of) verb stems: pay close attention to the interaction between morphology and phonology. Please identify the allomorphs (list them) and categorize the verbs into different classes on the basis of this. Collect all of the verbs in each class into a list containing all of the members of the hypothesized class: this will facilitate further analysis. For each allomorph specify whether it is determined by phonological or morphological conditions (or both)
2. Identify all other instances of allomorphy for other morphosyntactic categories. For each allomorph specify whether it is determined by phonological or morphological conditions (or both). State the specific conditions: this can be in prose or your favorite rule format. It is, of course, one thing to simply state conditions and quite another for those conditions to function explanatorily. For example, for some fictitious language I can state that a final segment *p* turns into a segment *k* when it precedes the segment *m*: while this may be sufficient to account for how a word such as *mip* becomes *mikm*, the unnaturalness of this change suggests that this is a good description of the arbitrary distributions, i.e., but does not explain why the change occurs in that environment. Given this, consider whether the conditions you identify for the various types of allomorphy seem to follow, i.e., be explainable, from properties of the environment in which they occur. If they do, then state these properties in your description of the allomorphy.

Consider the following verb forms: It is important to consult your IPA charts (handout out in class on 2 occasions).

- |            |               |              |                 |
|------------|---------------|--------------|-----------------|
| 1. antaa   | `to give'     | 35. huomata  | `to notice'     |
| 2. seuraan | `I follow'    | 36. pestä    | `to wash'       |
| 3. osaan   | `I know how'  | 37. saada    | `to receive'    |
| 4. huomaa  | `he notices'  | 38. ostaa    | `to buy'        |
| 5. seurata | `to follow'   | 39. nousta   | `to rise'       |
| 6. saan    | `I receive'   | 40. seuraa   | `he follows'    |
| 7. juoda   | `to drink'    | 41. tarvita  | `to need'       |
| 8. tullen  | `I come'      | 42. antaa    | `I give'        |
| 9. häiritä | `to disturb'  | 43. ymmärtää | `to understand' |
| 10. osata  | `to know how' | 44. hymyillä | `to smile'      |

|               |                  |               |               |
|---------------|------------------|---------------|---------------|
| 11. nousen    | `I rise'         | 45. juo       | `he drinks'   |
| 12. tarvitsen | `I need'         | 46. haluta    | `to want'     |
| 13. ymmärren  | `I understand'   | 47. ostaa     | `he buys'     |
| 14. alan      | `I begin'        | 48. nousee    | `he rises'    |
| 15. myyn      | `I buy'          | 49. tulee     | `he comes'    |
| 16. hymyilen  | `I smile'        | 50. saa       | `he receives' |
| 17. hallita   | `to consider'    | 51. myydä     | `to sell'     |
| 18. häiritsee | `he disturbs'    | 52. alkaa     | `he begins'   |
| 19. pesen     | `I wash'         | 53. voi       | `he is able'  |
| 20. menee     | `he goes'        | 54. hallitsee | `he rules'    |
| 21. antaa     | `he gives'       | 55. voida     | `to be able'  |
| 22. mennä     | `to go'          | 56. määrään   | `I order'     |
| 23. ymmärtää  | `he understands' | 57. häiritän  | `I disturb'   |
| 24. ostan     | `I buy'          | 58. tulla     | `to come'     |
| 25. alkaa     | `to begin'       | 59. huomaa    | `I notice'    |
| 26. osaa      | `he knows how'   | 60. seuraa    | `he follows'  |
| 27. menen     | `I go'           | 61. haluan    | `I want'      |
| 28. myy       | `he sells'       | 62. määrää    | `he orders'   |
| 29. haluaa    | he wants         | 63. tarjota   | `offer'       |
| 30. määrätä   | `to order        | 64. tarjoan   | `I offer      |
| 31. tarjoaa   | `he offers'      | 65. juon      | `I drink'     |
| 32. voin      | `I am able'      | 66. hymyilee  | `he smiles'   |
| 33. pesee     | `he washes'      | 67. tarvitsee | `he needs'    |
| 34. hallita   | `to rule'        | 68. hallitsen | `I rule'      |

3. You should know have some provisional hypotheses which you can try to confirm by reference to the data in Part 2.

### Question 1: Part 2

Given your answers to the preceding questions, consider the following data with an eye toward evaluating how well these data support your claims for the analysis of 1–68. The data below consists of additional verbs, indicated by \*, which should assist you in firming up your analysis. With the exception of the new verbs, which additionally contain present tense forms, all the verbs below are grouped into sets containing past tense, perfect tense, impersonal, second infinitive. Once again, in order to use this data for maximum advantage, it is important to continually entertain hypotheses and to organize the data so that you can see whether these hypotheses are supported.

1. Identify each of the markers (including allomorphs) for these morphosyntactic categories, as well as any other categories you encounter.

2. Re-evaluate your results for Part 1 on the basis of this data. If your results (classification of verbs was correct), provide additional support for it using evidence from Part 2. Naturally, if your hypotheses from Part 1 were incorrect, revise them and provide evidence for your new hypothesis.

1. annoin           `I gave'                   antoi       `he gave'  
olen antanut     `I have given'         annettiin `one gave'  
antaessasi       `when you (sg) give'
  
2. huomasin       `I noticed'               huomasi    `he noticed'  
olemme huomanneet `we have noticed'  
huomattin    `one noticed'  
huomatessamme `when we notice'
  
3. määräsin       `I ordered'               määräsi    `he followed'  
olet määrännyt `you (sg) have ordered'  
määrättiin    `one ordered'  
määrätessämme `when we order'
  
4. \*jaksaa         `to be able'               jaksan     `I am able'  
jaksaa         `he is able'               jaksoin    `I was able'  
jaksoi         `he was able'  
olen jaksanut `I have been able'     jaksettiin `one was able'  
jaksassani     `when I am able'
  
5. sain            `I received'               sai         `he received'  
olemme saaneet `we have received'  
saatiin        `one received'  
saadessasi     `when you (sg) receive'
  
6. ostin           `I bought'                osti        `he bought'  
on ostanut     `he has bought'         ostettiin `one bought'  
ostaessamme   `when we buy'
  
7. aloin           `I began'                 alkoi       `he began'  
olemme alkaneet `we have begun'     alettiin    `one began'  
alkaessaan     `when he begins'
  
8. ymmärsin       `I understood'            ymmärsi    `he understood'  
olet ymmärtänyt `you (sg) have understood'  
ymmärrettiin   `one understood'  
ymmärtäessänne `when you (pl.) understand'

9. \* rientää `to hurry' riennän `I hurry'  
 rientää `he hurries' riensin `I hurried'  
 riensi `he hurried'  
 olet rientänyt `you (sg) have hurried'  
 rienennettiin `one hurried'  
 rientäessään `when he hurries'
10. hallitsin `I ruled' hallitsi `he ruled'  
 olet hallinnut `you (sg) have ruled' hallittiin `one ruled'  
 hallitessasi `when I rule'
11. huomasin `I noticed' huomasi `he noticed'  
 olemme huomanneet `we have noticed'  
 huomattiin `one noticed'  
 huomatussamme `when we notice'
12. join `I drank' joi `he drank'  
 ovat juoneet `they have drunk' juotiin `one drank'  
 juodessamme `when we drink'
13. \*ratkaista `to decide' ratkaisin `I decide'  
 ratkaisee `he decides' ratkaisin `I decided'  
 ratkaisu `he decided'  
 olen ratkaissut `I have decided' ratkaistiin `one decided'  
 ratkaistessani `when I decide'
14. häiritsin `I disturbed' häiritsi `he disturbed'  
 on häirinnyt `he has disturbed' häirittiin `one disturbed'  
 häiritessämme `when we disturb'
15. \*vieraila `to visit' vierailin `I visit'  
 vierailee `he visits' vierailin `I visited'  
 vieraili `he visited'  
 olemme vierailleet `we have visited'  
 vierailtiin `one visited'  
 vieraillessani `when I visit'
16. \*viedä `to take' vien `I take'  
 vie `he takes' vein `I took'  
 vei `he took' vietiin `one took'  
 on vienyt `he has taken'  
 viedessani `when I take'

17. osasin           `I knew how'           osasi       `he knew how'  
 olen osannut   `I have known how'  
 osattiin   `one knew how'  
 osatessaan   `when he knows how'
18. halusin           `I wanted'           halusi       `he wanted'  
 olen halunnut   `I have wanted'   haluttiin   `one wanted'  
 halutessanne   `you (pl) have followed'
19. nousin           `I rose'           nouisi       `he rose'  
 olette nousseet `you (pl) have risen'  
 noustiin   `one rose'  
 noustessaan `when he rises'
20. harkitsin        `I considered'       harkitsi    `he considered'  
 olette harkinneet `you (pl) considered'  
 harkittiin        `one considered'  
 harkitessanne    `when they consider'
21. myin    `I bought'                           myi    `he bought'  
 olette myyneet `you (pl) have bought'  
 myyttiin        `one bought'  
 myydessani    `when I buy'
22. voin    `I was able'                           voi    `he was able'  
 ovat voineet    `they have been able'  
 voitiin         `one was able'  
 voidessanne    `when you (pl) are able'
23. \*epäillä    `to doubt'                           epäilen    `I doubt'  
 epäilee    `he doubts'                    epäilin    `I doubted'  
 epäili    `he doubted'  
 olet epäillut `you (sg) have doubted'  
 epäiltiin    `one doubted'  
 epäillessani `when I doubt'
22. seurasin    `I followed'                   seurasi    `he followed'  
 olette seuranneet `you (pl) have followed'  
 seurattiin    `one followed'  
 seurattessani `when I follow'
23. tulin    `I came'                           tuli    `he came'  
 ovat tulleet    `that have come'            tultiin    `one came'  
 tullessanne    `when you (pl) come'

24. join `I drank'                      joi          `he drank'  
ovat juoneet `they have drunk'      juotiin     `one drank'  
juodessamme `when we drink'
25. pesin `I washed'                      pesi          `he washed'  
olet pessyt `you (sg) have washed'      pestiin     `one washed'  
pestessani `when you (sg) wash'
26. \*suhista `to hiss'  
suhisee `he hisses'                      suhisen     `I hiss'  
suhisi `he hissed'  
olemme suhisseet `we have hissed'  
suhistiin                      `one hissed'  
suhistessani                      `when I hiss'
27. hymyilin `I smiled'                      hymyili     `he smiled'  
olen hymyillyt `I have smiled'      hymyiltiin     `one smiled'  
hymyillessasi `when you (sg) smile'
28. tarvitsin `I needed'                      tarvitsi     `he needed'  
ovat tarvinneet `they have needed'      tarvittin     `one needed'  
tarvitessani `when I need'

### Question 1: Part 3

Describe how negatives are formed in this language and what bearing this might have on standard claims concerning *The Lexical Integrity Hypothesis*? Have you encountered other data in the either Parts 1 or 2 that may raise similar issues to those you observe concerning negation?

1. en saanut                      `I didn't receive'
2. emme pesseet                      `we didn't wash'
3. ette epäilleet                      `you (pl) didn't doubt'
4. hän ei suhissut                      `he didn't hiss'
5. et vienyt                      `you (sg) didn't take'
5. hän eivät halunneet                      `they didn't want'

## Question 2

The language for this problem has complex verbal morphology. There are a few plural nouns that correspond idiosyncratically to their singular forms. Don't attempt to account for this. Assume that all of the verb forms take the basic shape CəCəC, but don't try to account for this either. The suffix -m on the verbs is a past tense marker.

1. Divide the words into morphemes (markers of morphosyntactic properties), specifying each root and each affix.
2. There are two possible analyses of of the different forms occurring with 3<sup>rd</sup> person markers. One analysis assumes morphologically conditioned allomorphy, while the other assumes that a single morph is associated with several grammatical properties. Assume the latter *portmanteau* analysis.
3. Specify the order of affixes in these complex wordforms.



|     |                   |                                  |  |
|-----|-------------------|----------------------------------|--|
| 1.  | aβa               | nəzəzəm                          | 'Father dreamed'                         |
| 2.  | ətəm <sup>w</sup> | zəkərətʃm                        | 'Sister jumped'                          |
| 3.  | dawit             | təjna zəkərnəm                   | 'David and we jumped'                    |
| 4.  | dawit             | təraxel anfənək'o                | 'David and Rachel didn't burp'           |
| 5.  | raxel             | təgərəd nəzəzəmamwe              | 'did Rachel and the girl dream?'         |
| 6.  | k'jəs             | annəkəβnəj                       | 'we didn't find the priest'              |
| 7.  | ərtʃ              | jəaŋgatʃa sədədənm               | 'the boy chased the cat'                 |
| 8.  | dawit             | jəgərəd nəgədənamwe              | 'did David touch the girl?'              |
| 9.  | jəhakim           | g'ək'ətɕujm                      | 'you (pl.) accompanied the doctor'       |
| 10. | hakim             | jəgred anxətəβənəma              | 'the doctor did not vaccinate the girls' |
| 11. | zəkərxəm          |                                  | 'you (sg.) jumped'                       |
| 12. | mis               | g'ək'ətojɱ                       | 'the men accompanied him'                |
| 13. | ijta              | jəgred nəgədəmajəmam             | 'the women touched the girls'            |
| 14. | k'jəs             | jətəm <sup>w</sup> g'ək'ətojəmam | 'the priests accompanied the sisters'    |
| 15. | mis               | jəgijə nəkəβojomwe               | 'did the men find the dogs?'             |
| 16. | ijta              | jəbər kəfətəmajɱ                 | 'the women opened the door'              |
| 17. | jəraxel           | sədədəmajam                      | 'they (fem.) chased Rachel'              |
| 18. | mis               | jəfərəz sədədənm                 | 'the man chased the horse'               |
| 19. | gijə              | anzəkərowe                       | 'didn't the dogs jump?'                  |
| 20. | jətika            | nəgədx <sup>w</sup> inm          | 'I touched the baby'                     |
| 21. | aβa               | təijə jəbər kəfətənojɱ           | 'Father and I opened the doors'          |
| 22. | jəgijə            | sədədx <sup>w</sup> inom         | 'I chased the dogs'                      |
| 23. | jəaŋgatʃa         | nəgədxənm                        | 'you (sg.) touched the cat'              |
| 24. | jəraxel           | xətəβnəjam                       | 'we vaccinated Rachel'                   |
| 25. | miʃt              | jəfərəz nəkəβətʃnom              | 'the woman found the horses'             |

### Question 3: Extra Credit

Consider the following pair of verbs:

|         |           |           |                             |
|---------|-----------|-----------|-----------------------------|
| skrìsti | `to fly'  | apskrìsti | `fly around'                |
| veřkti  | `to cry'  | praveřkti | `cry out (e.g., one's eyes) |
| áugti   | `to grow' | išáugti   | `outgrow (e.g., one's coat) |
| eīti    | `to go'   | péreīti   | `go though'                 |
| imti    | 'to take' | atimti    | 'to take away'              |

1. What is the nature of the relation between these pairs of words? Is this derivational or inflectional?
2. List the markers that participate in this relation.

Now consider the following pairs of verbs:

|           |                |             |                             |
|-----------|----------------|-------------|-----------------------------|
| kélti     | 'to raise'     | kéltis      | 'to get (oneself) up'       |
| atkélti   | 'to move'      | atsikélti   | 'to move oneself'           |
| statýti   | 'to build'     | statýtis    | 'to build for oneself'      |
| pastatýti | 'to set'       | pasistatýti | 'to set for oneself'        |
| gelbéti   | 'to rescue'    | gelbétis    | 'to save oneself'           |
| pagelbéti | 'to help'      | pasigelbéti | 'to help oneself'           |
| reņgti    | 'to prepare'   | reņgtis     | 'to prepare for oneself'    |
| apreņgti  | 'to dress'     | apsireņgti  | 'to get (oneself) dressed'  |
| išimti    | 'to take out'  | išsiimti    | 'to take out for one self'  |
| perimti   | 'to take over' | persiimti   | 'to get enthused about sm.' |

3. What is the nature of the relation between these pairs of words? Is it derivational or inflectional?
4. Characterize the nature of the class of words in the righthand column.
5. Identify the marker associated with class of words in this column.
6. Consider the distribution of this marker & speculate about whether it exhibits an expected interaction with the kind of operation you identified in questions 1 & 2. (Hint: Can e.g. kéltis be the base for the formation of atsikélti?)

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