French

The singular definite article has two underlying forms, masculine and feminine. For the masculine, the surface forms are [lœ] and [l], for the feminine the surface forms are [lœ] and [l].

1. [limœʒ] ‘the image’  2. [lœvœʒ] ‘the cow’
3. [lœvœʒ] ‘the back’  4. [lœmutœ] ‘the sheep’
5. [lo] ‘the water’    6. [lœbuʃ] ‘the mouth’
7. [lœtœø] ‘the author’  8. [lœvœ] ‘the wine’

The plural definite article has one underlying form, and two surface forms [le] and [lez].

1. [lezimœʒ] ‘the images’  2. [lœvœʒ] ‘the cows’
3. [lezœvœʒ] ‘the backs’  4. [lezœmutœ] ‘the sheep’
5. [lezœzo] ‘the waters’  6. [lezœbuʃ] ‘the mouths’

You should write two rules that take care of the alternations in the definite article forms.

The following words should appear to be exceptions to those rules:

1. [lœœʃ] ‘the axe’  2. [lœibœu] ‘the owl’
3. [lœœwo] ‘the hero’  4. [lœootœø] ‘the height’

1. [lœœʃ] ‘the axes’  2. [lœibœu] ‘the owls’
3. [lœœwo] ‘the heroes’  4. [lœootœø] ‘the heights’

A non-abstract analysis would mark these words in the lexicon as exceptions to both rules.

a) Can you propose an abstract analysis of the underlying forms that explains why these words are exceptions to both rules?

b) Given this underlying form, what rule of absolute neutralization do you need to get the surface forms?

c) How is it ordered with respect to your rules for the definite articles, and what are the ordering relations?

In case you are thinking that French speakers are just following spelling, please consider the following:

1. 'lhotel' [lotel] ‘the hotel’
   les hotels [lezotel] ‘the hotels’
2. 'lhiver' [livœʃ] ‘the winter’
   les hivers [lezivœʃ] ‘the winters’
3. 'lhorreur' [loœœøœʃ] ‘the horror’
   les horreurs [lezœœøœʃ] ‘the horrors’
Spanish generally has a five vowel monophthong system: /i, e, a, o, u/. In many dialects, including Castillian, there is allophonic variation among the mid vowels:

1. [jose] 'I know'
2. [sjɛmpre] 'always'
3. [tɔrnɔɾ] 'to turn'
4. [bwɛno] 'good' (singular)
5. [bwɛνɔs] 'good' (plural)
6. [komɔ] 'I eat'
7. [komɛs] 'you eat' (2nd per., sg)
8. [kome] 'he/she eats'
9. [tɛmplo] 'temple'
10. [soldaðo] 'soldier'

Write a rule for the realization of /o/ and /e/ in this dialect.

In a different dialect, Andalucian Spanish, the phonetic forms of the second and third person singular forms of verbs such as eat are different, as are the plural and singular forms of adjectives such as good:

1A. [jose] 'I know'
2A. [sjɛmpre] 'always'
3A. [tɔrnɔɾ] 'to turn'
4A. [bwɛno] 'good' (singular)
5A. [bwɛνɔs] 'good' (plural)
6A. [komɔ] 'I eat'
7A. [komɛs] 'you eat' (2nd per., sg)
8A. [kome] 'he/she eats'
9A. [tɛmplo] 'temple'
10A. [soldaðo] 'soldier'

a) What would a phonemic analysis tell you about the status of [e, ɛ, o, ɔ] in Andalucian?

b) Can you suggest an analysis involving abstractness that preserves the same vowel system for Andalucian as in other Spanish varieties?

c) What the advantages/disadvantages of each approach?