A morphonological example 1

Latin verb roots ending in a coronal stop take the -s- perfect allomorph and many verbs have corresponding agent nominals in -sor. Heslin (1987) observes that root-final coronal is assibilated after short vowels, as in (1a), and deleted before long nuclei, as in (1b).

(1) Perfect passive participles in -s-us and agents in -sor:

a.	metere	'reap'	messus	'harvested'	messor	'reaper'
	fodere	'dig'	fossus	'dug'	fossor	'digger'
b.	plaudere	'applaud'	plausus	'applauded'	plausor	'cheerer'

ldere'play' lsus'played' lsor'player'

2 A mathematical example

Zipf (1949) notes a linear relationship between log word frequency r and log frequency r. A generalized form of this relationship, shown in (2), is what is now known as Zipf's Law (e.g., Baroni, 2009).

(2)
$$f(C,\alpha) = \frac{C}{r^{\alpha}}$$

References

M. Baroni. Distributions in text. In A. Lüdeling and M. Kyöto, editors, Corpus linguistics: An international handbook, pages 803–821. Mouton de Gruyter, 2009. T. P. Heslin. Prefixation in Latin. Lingua, 72(2-3):133-154, 1987. G. K. Zipf. Human behavior and the principle of least effort: An introduction to human ecology. Addison-Wesley, Cambridge, 1949.