Complementary distribution in Spanish

- What kind of **descriptive generalization** can we make about the Spanish data set in McCarthy (2008), sec 2.8, exercise (30)?

30 In Spanish, the voiced stops [b, d, g] are in complementary distribution with their fricative counterparts [β, ð, ɣ]. Using the following data (from a problem set in Halle and Clements 1983), formulate a descriptive generalization and construct an OT analysis that is consistent with richness of the base.

[aɣrio]	'sour'	[komuniðað]	'community'
[gustar]	'to please'	[deðo]	'finger/toe'
[xweɣo]	'game'	[droɣas]	'drugs'
[alβondiɣas]	'meatballs'	[seða]	'silk'
[gastos]	'expenses'	[ganaðo]	'cattle'
[gonsales]	a surname	[usteð]	'you (sg. polite)'
[jaɣa]	'sore, boil'	[bastante]	'plenty'
[uβa]	'grape'	[brinkar]	'to jump'
[futbol]	'soccer'	[suβo]	'I climb'
[alɣo]	'something'	[uβo]	'there was'
[sombra]	'shade'	[kluβ]	'club'
[saβino]	'cypress'	[karβon]	'coal'
[kaβe]	'it fits'	[berðe]	'green'

- What kind of **constraint ranking** will we need to **enforce** this pattern?

- What role does **richness of the base** play in this discussion?