(K) The Dualization Game (1/2)

K1. Any three nouns that end in x, s, or z and take an -es plural ending – ideally one each for each of those three last letters. For example, buzz ⇒ buzzes, class ⇒ classes, tax ⇒ taxes.

K2. * quiz ⇒ quizes, * child ⇒ childs
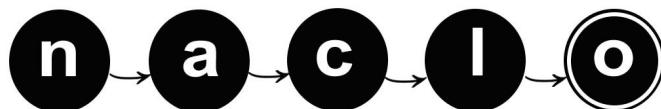
K3. * nidaahné ⇒ niahné, * nidaniiché ⇒ niniiché

K4. Complete Dualizer Machine 2.0 (cells not given in question are bolded):

Entry state	Read	Write	Move	Exit State
S0	d	Ø	R	S1
S0	[otherwise]	[N/A]	R	S0
S1	[otherwise]	**Ø**	**L**	S2
S2	**[otherwise] or Ø**	[N/A]	**L**	S3
S3	i	[N/A]	**L**	S4
S3	**[otherwise]**	**[N/A]**	[N/A]	HALT
S4	**n**	[N/A]	**R**	S5
S4	[otherwise]	[N/A]	[N/A]	HALT
S5	[otherwise]	**a**	[N/A]	HALT

K5. Complete Second-Personizer Machine (cells not given are bolded):

Entry state	Read	Write	Move	Exit State
S0	**s**	**ł or others[1]**	**R**	S1
S0	[otherwise]	[N/A]	R	S0
S1	**h**	**Ø**	**L**	S2
S1	[otherwise]	**[N/A]**	L	S2
S2	[otherwise]	**[N/A] or ł**	**L**	S3
S3	**í**	[N/A]	[N/A]	HALT
S3	[otherwise]	**[N/A] or i**	L	S4
S4	**i, í**	[N/A]	[N/A]	HALT
S4	**y**	**n**	[N/A]	HALT
S4	[otherwise]	[N/A]	**R**	S5
S5	[otherwise]	**í**	[N/A]	HALT

[1] Any other letter, [N/A], and Ø are all acceptable answers here – however, if an answer other than ł is given, the Write column of S2 must be ł. If ł is given in S0 Write, either answer is acceptable for S2 Write.

n → a → c → l → o

(K) The Dualization Game (2/2)

K6. íísíníts'ą́ą́' will be transformed unsuccessfully. Both verbs have predictable second-person forms (íísíníłts'ą́ą́' and bigháníłdééh respectively), but the machine will attempt to apply its transformations on and around the first s in íísíníts'ą́ą́', rather than the second s. The unsuccessful output for this verb will be ííłíníts'ą́ą́'.