\[ (g_0, \Delta aqba) \vdash (g_1, \Delta aqba) \vdash (g_2, \Delta A_qba) \]
\[ (g_2, \Delta A_qba) \vdash (g_3, \Delta A_{qba}) \vdash (g_3, \Delta A_{aqb}) \]
\[ (g_4, \Delta A_{a qb}) \vdash (g_4, \Delta A_{a qb}) \vdash (g_4, \Delta A_{b a q}) \vdash (g_4, \Delta A_{a qb}) \]
\[ (g_5, \Delta A_{a b} A) \vdash (g_5, \Delta A_{a b} A) \vdash (g_5, \Delta A_{a b} A) \vdash (g_5, \Delta A_{a b} A) \]
\[ (g_6, \Delta A_{a b} A) \vdash (g_6, \Delta A_{a b} A) \vdash (g_6, \Delta A_{a b} A) \vdash (g_6, \Delta A_{a b} A) \vdash (g_6, \Delta A_{a b} A) \]
\[ 9.6a \text{ idea: read an "a", mark that "a", match and mark with a "b", accept if b's are left over.} \]

9.15.a. move to end of 1's and append a 1.

\[ \rightarrow (g_0, \Delta A_{s} R) \rightarrow (l_1, R) \rightarrow (l_1, L) \rightarrow (l_1, L) \rightarrow (\Delta A_{s} R, A) \]

b. use string copy machine
d. remove 1 of every 2 "1"'s from the string.
   read 1 and mark. go to end of string & blank out a 1.
   repeat. if there is a "1" left, blank it. unmark.
   what is left.

7.1. \[ (g_0, bbbcb, Z_0) \vdash (g_0, bbbcb, bZ_0) \vdash (g_0, cbcb, bbZ_0) \vdash (g_1, bb, bbZ_0) \vdash (g_1, b, bZ_0) \vdash (g_1, A, Z_0) \vdash (g_2, A, Z_0) \]
\[ (g_0, baca, Z_0) \vdash (g_0, acapaZ_0) \vdash (g_0, ca, abZ_0) \]
\[ \vdash (g_1, A, abZ_0) \vdash (g_1, A, bZ_0) \text{ crash.} \]