1 Weakenings

Let $A = (M_A, \lambda_A, P_A)$ be an Abramsky-Jagadeesan game. We give two different notions of a *weakening* of A (informally, a game that is 'easier' than A from the point of view of Player P):

1. We call a game $B = (M_B, \lambda_B, P_B)$ an *antecedent weakening* if $M_B = M_A$, $\lambda_B = \lambda_A$ and $P_B \subset P_A$ such that whenever is is Player P's turn to move in B, she has all the options available that she had in A:

   For all $s \in P_B$ ending in an O-move, and for all $a \in M_A$ such that $sa \in P_A$, we have $sa \in P_B$.

2. We call a game $C = (M_C, \lambda_C, P_C)$ a *precedent strengthening* if $M_C = M_A$, $\lambda_C = \lambda_A$ and $P_A \subset P_C$ such that for any P-play in C that also occurred in A,