Arrow diagrams on a line and on a circle

\[
\begin{align*}
\text{(comes from } \gamma = \gamma') \quad & \quad \mathbb{A}^w(\gamma) \xrightarrow{\gamma} \mathbb{Q}[w_i>1] \\
\text{which implies } \mathbb{A}^w(\gamma) \xrightarrow{\gamma} \mathbb{Q}[w_i>1] \\
\text{was found by } \mathbb{A}^w(\gamma) \xrightarrow{\gamma} \mathbb{Q}[w_i>1] \\
\text{to be an Alexander polynomial for long } w\text{-knots, which does not descend to closed } w\text{-knots.}
\end{align*}
\]

It probably does, however, extend the usual Alexander polynomial for long knots.