Rearrangement takes place during radical cyclization involving some silyl ethers. The primary evidence for this rearrangement is the dependence of product ring size on the concentration of Bu$_3$SnH, the hydrogen-atom transfer in these reactions. When the reaction shown in eq 14 is conducted in dilute Bu$_3$SnH solution, the major product contains a six-membered ring, but at high Bu$_3$SnH concentration reaction regioselectivity changes to give a product with a five-membered ring. This concentration dependence can be explained by the more rapidly formed, but less stable, radical 46 having sufficient time and energy, when the concentration of Bu$_3$SnH is low, to be converted into the more stable radical 47, either by a rearrangement that involves a cyclic transition state or by a fragmentation-addition sequence (Scheme 18). At high Bu$_3$SnH concentration hydrogen-atom abstraction occurs before ring expansion can take place.

![Scheme 18](image)

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