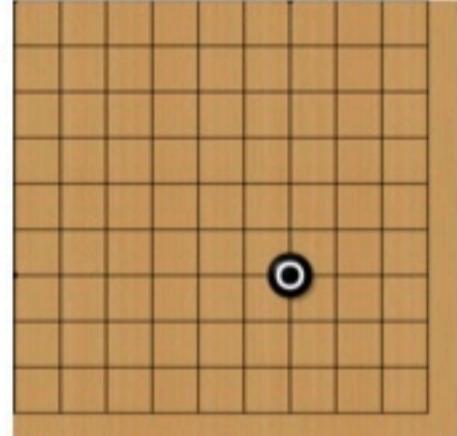
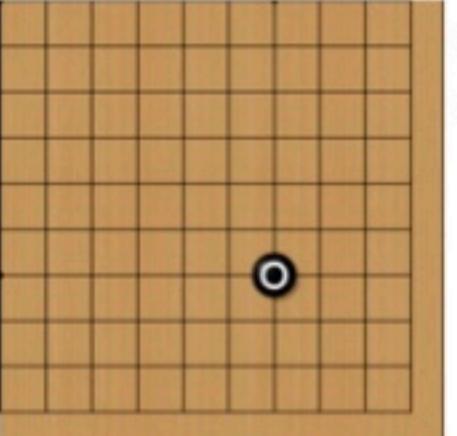
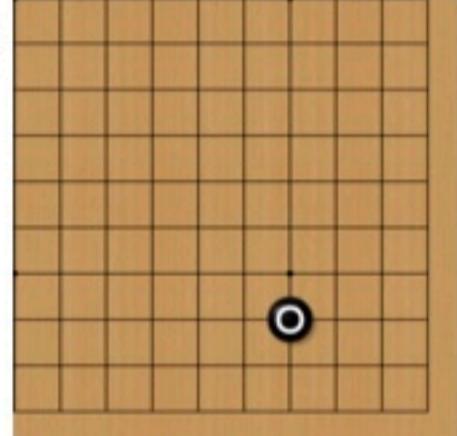
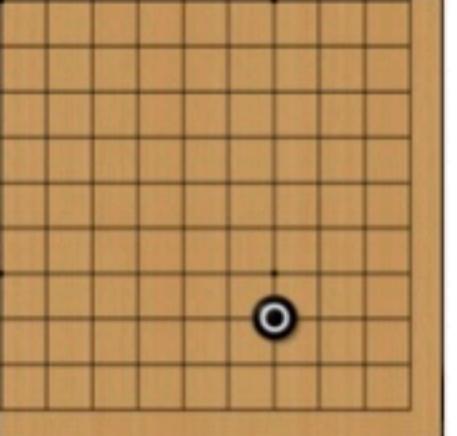
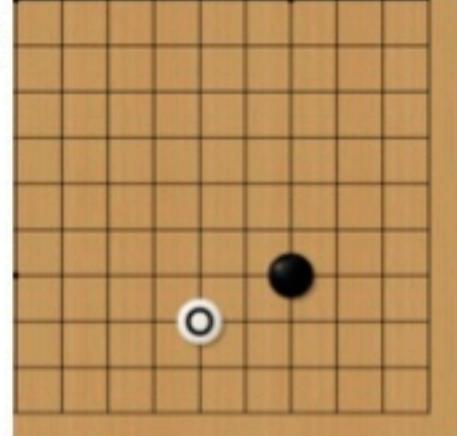
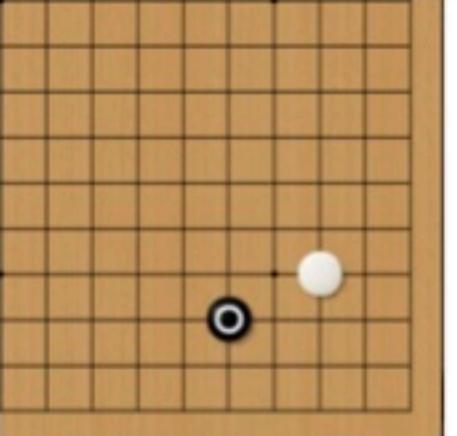
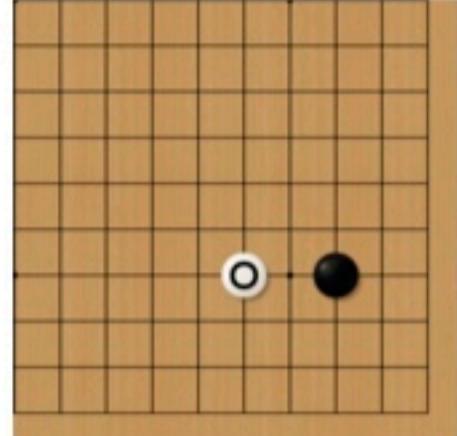
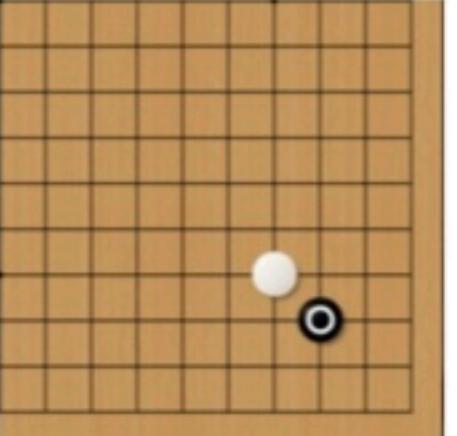
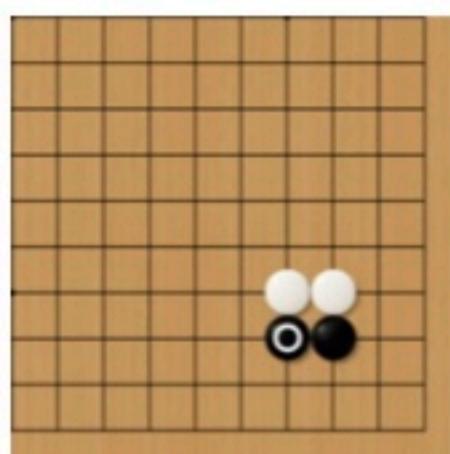
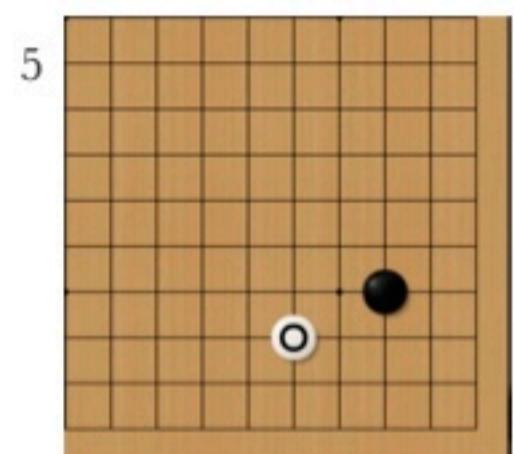


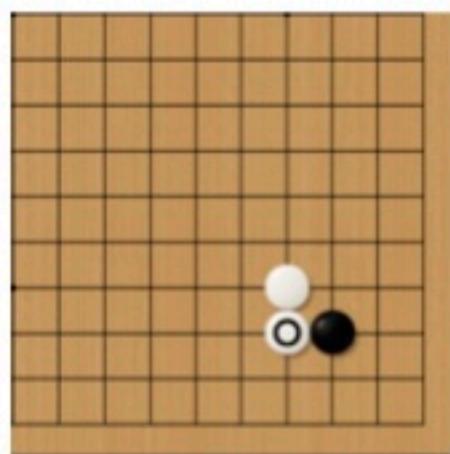
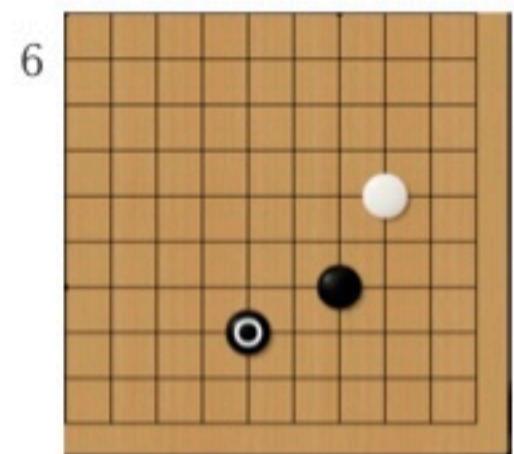
6. Saffidine, A., Teytaud, O., & Yen, S.-J. (2015). Go complexities. In Proceedings of the Advances in Computer Games Conference (pp. 88–99). Leiden, Netherlands: Springer.
doi.org/10.1007/978-3-319-27992-3_8

Table I.

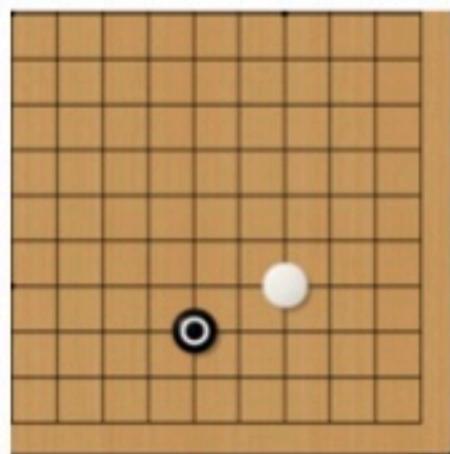
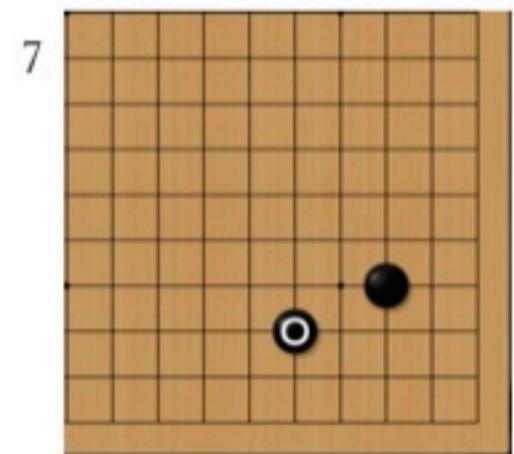
	2007 (a)	2025 (b)	Notes
1			the 4-4 star point remains most frequent
2			komoku (3-4) also remains as second most frequent pattern
3			A low approach to a 3-4 point is nowadays more urgent than both a low approach to 4-4, (pattern 3a) and a high approach to a 3-4 (pattern 4a)
4			A san-san invasion is more urgent than a high approach to an opponent's komoku



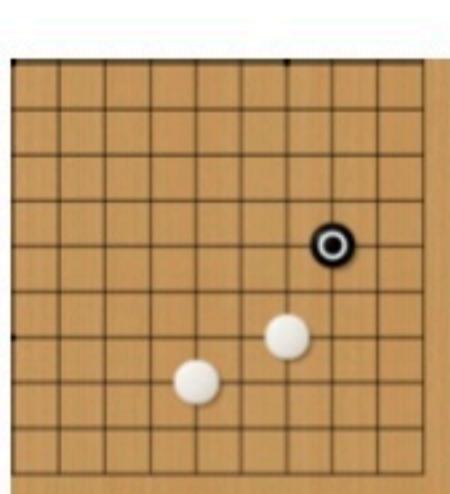
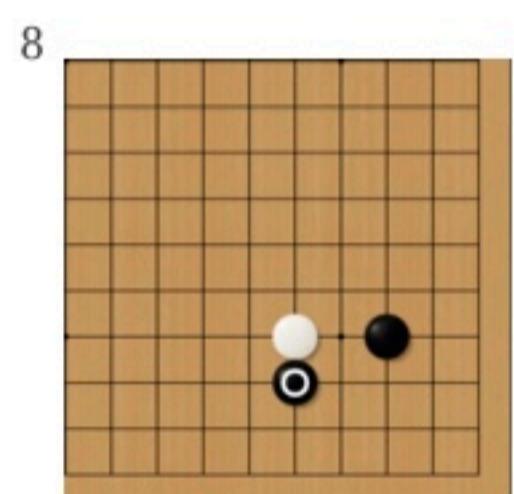
this standard sequence after a san-san invasion leaves the invader in gote, suggesting the invaded stone may reply with *tennuki* before extending



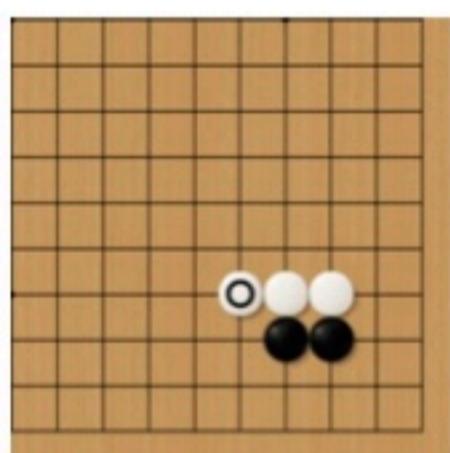
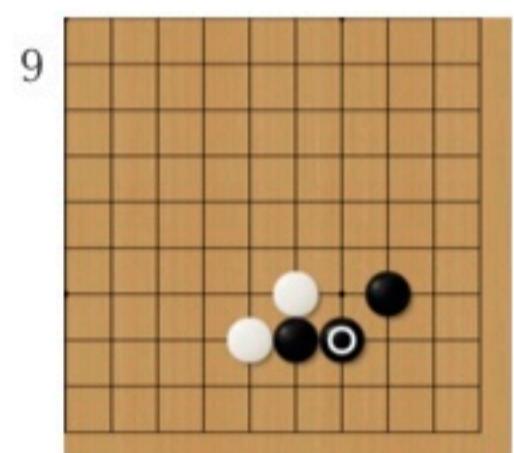
Once white extends, it is less likely that black will *tennuki*, considering the result of pattern 5b



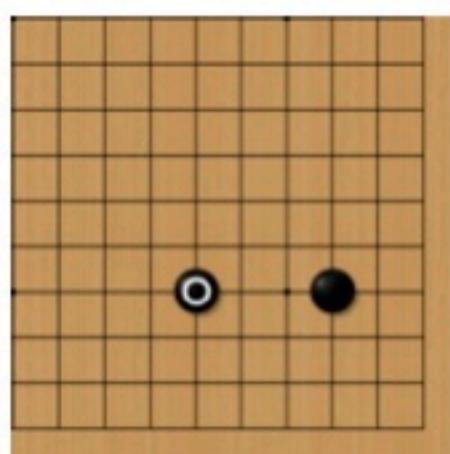
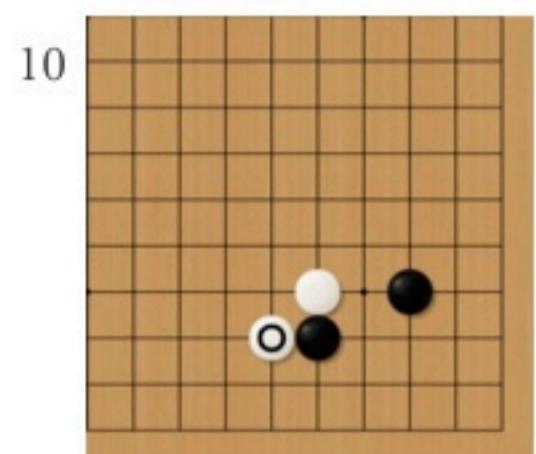
A low approach to the 4-4 is now less frequent than a san-san invasion, see pattern 5a



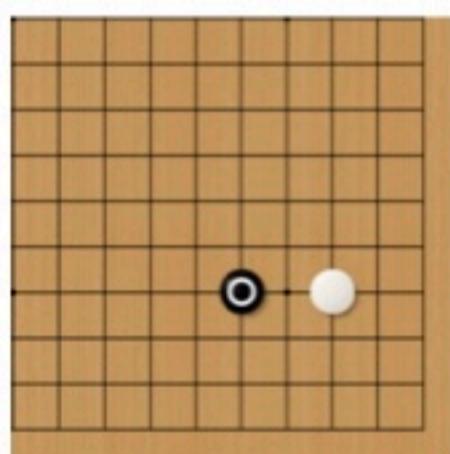
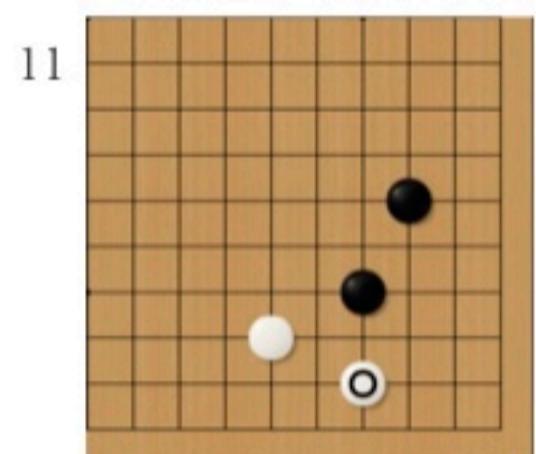
This approach resembles the *joseki* pattern in 6a but is actually a low approach to the opponent's enclosure from the 4-4 point. The fact that this enclosure pattern does not appear without the approach, suggests this move follows most of the time



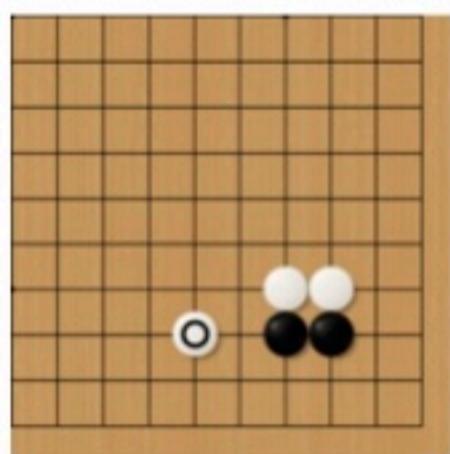
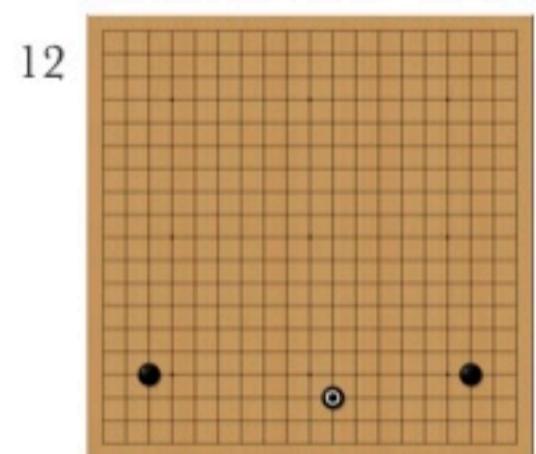
A *joseki* continuation to pattern 5b not as frequent



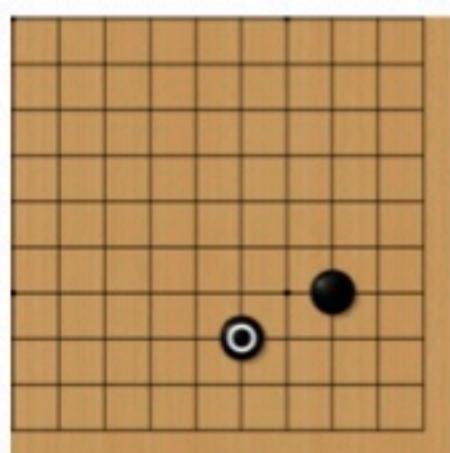
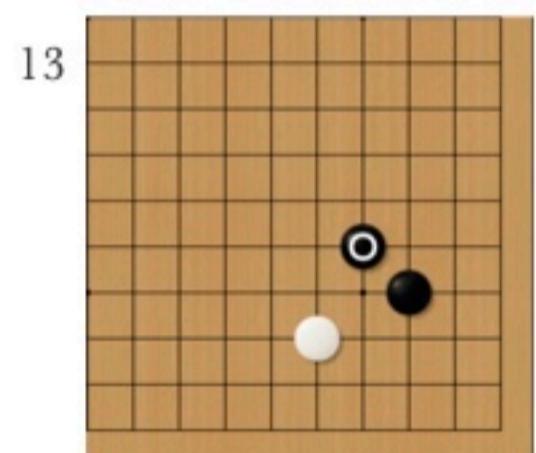
Two space jump from komoku appears as the most urgent form of enclosing a corner



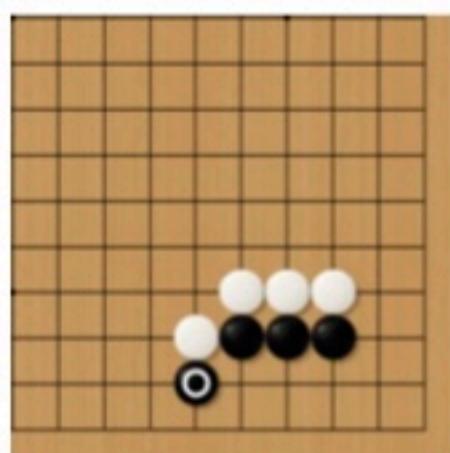
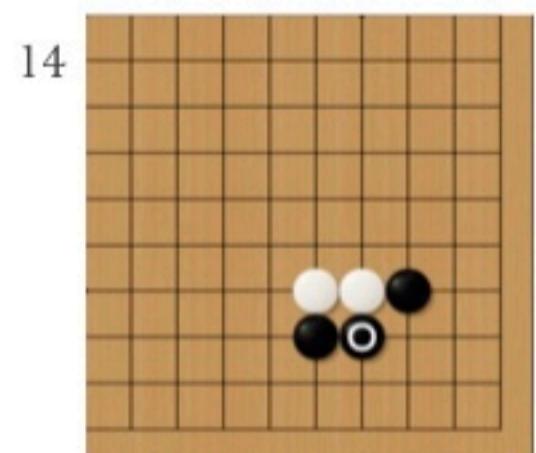
a high approach to komoku descends from 4th to 11th most frequent pattern



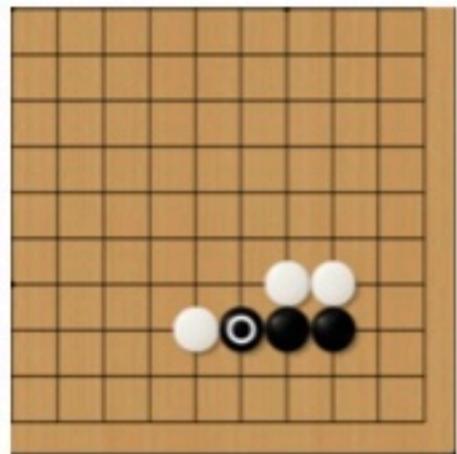
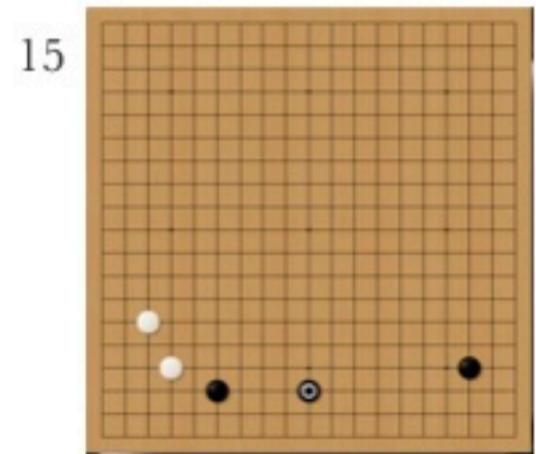
Another continuation from pattern 5b precedes its subsequent *joseki* moves in patterns 14b, 15b and 17b



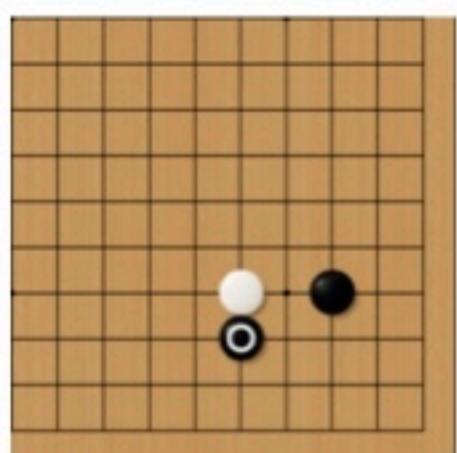
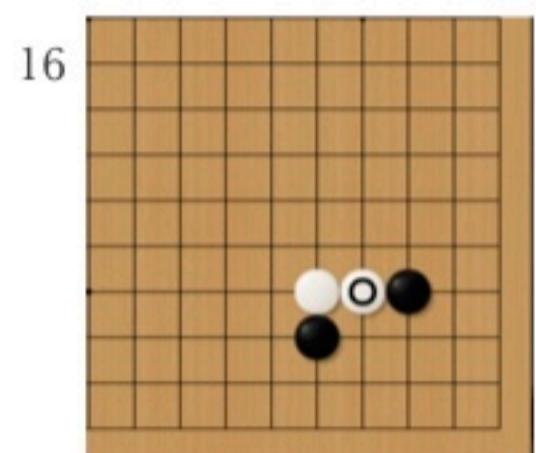
This move is now less frequent, see pattern 7a



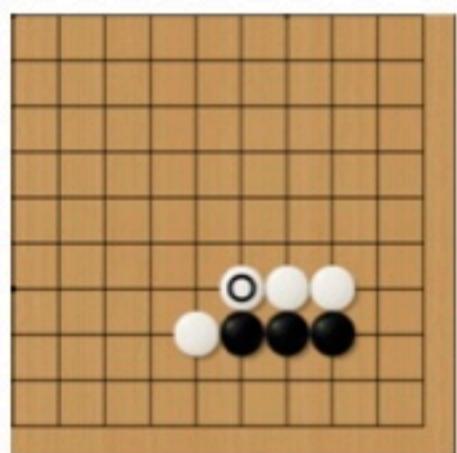
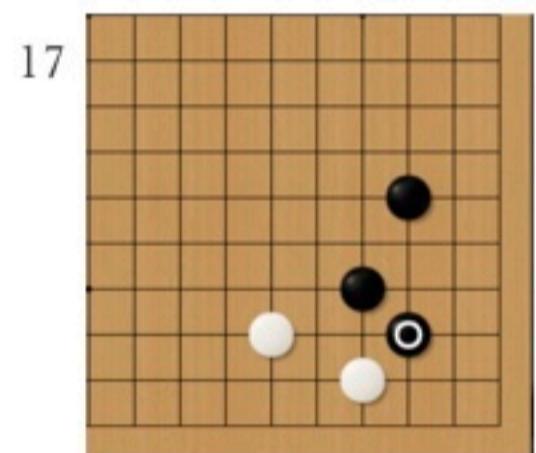
This *joseki* pattern naturally appears after a san-san invasion, but an extension from white's stone in the third line is not always the immediate follow-up, suggesting white's *tennuki*



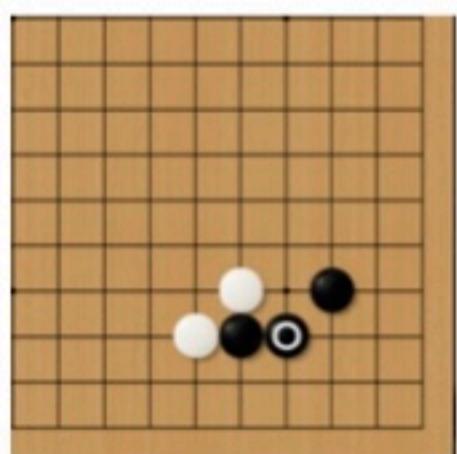
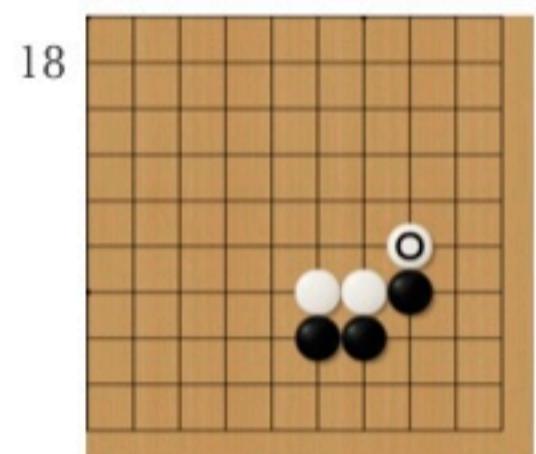
Though less frequent, this sequence from *san-san* invasion *joseki* also suggests white's *tennuki*, instead of following up with *hane* as in pattern 14b



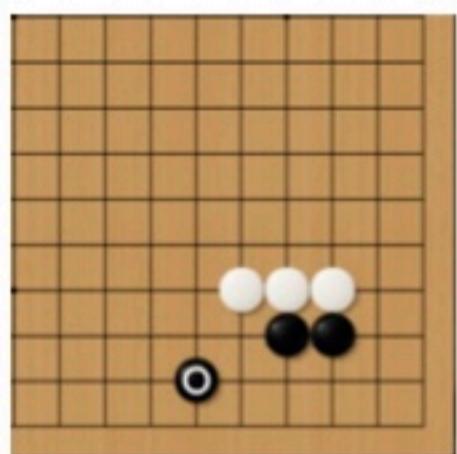
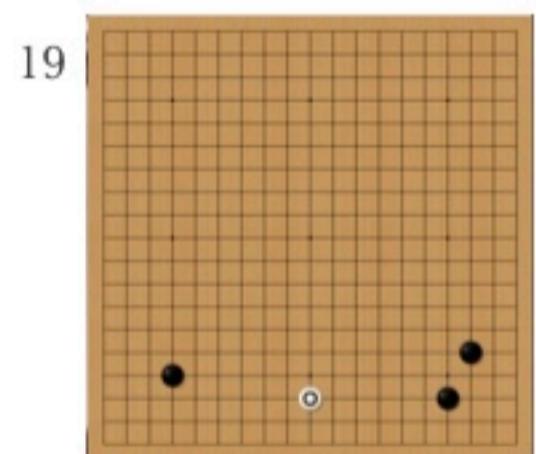
This pattern has become less frequent, see 8a



Similarly to pattern 14b, this sequence suggests black's *tennuki* immediately after white's *hane*.



This *joseki* pattern is less frequent in modern play, see 9a



Another continuation from pattern 9b