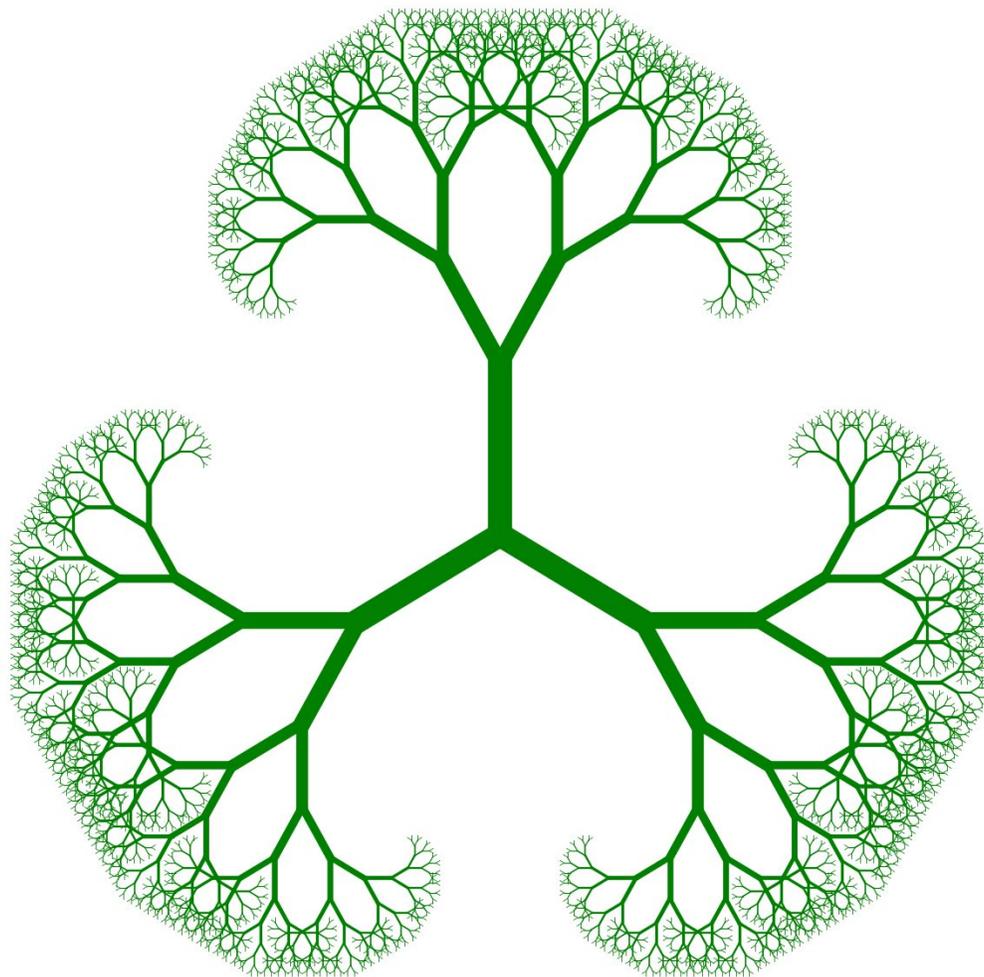


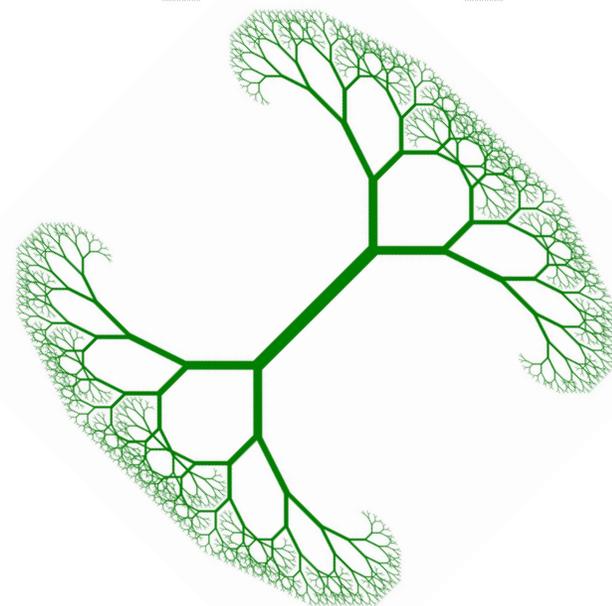
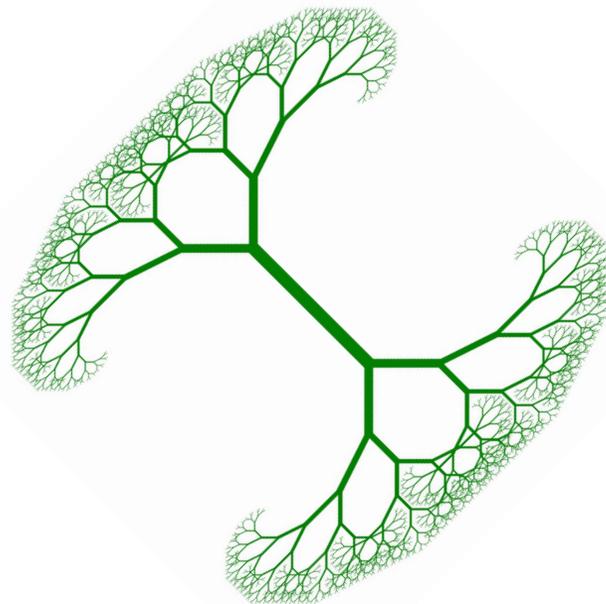
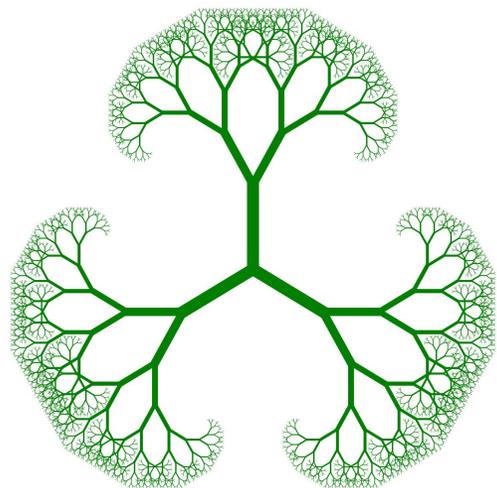
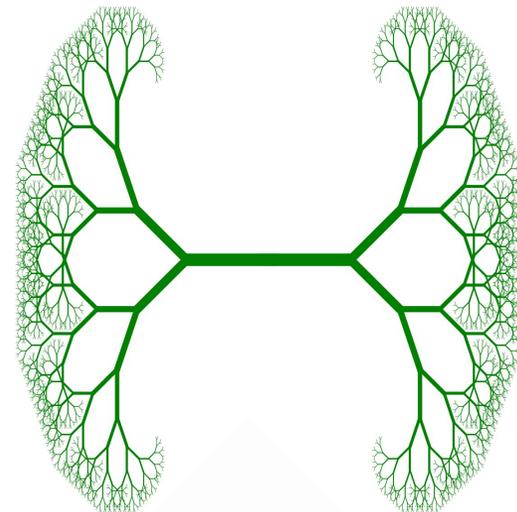
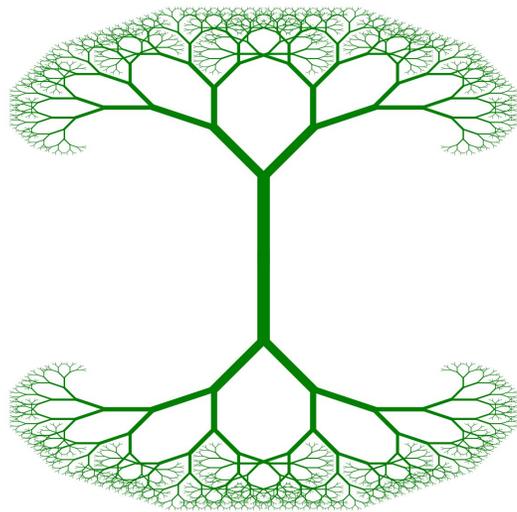
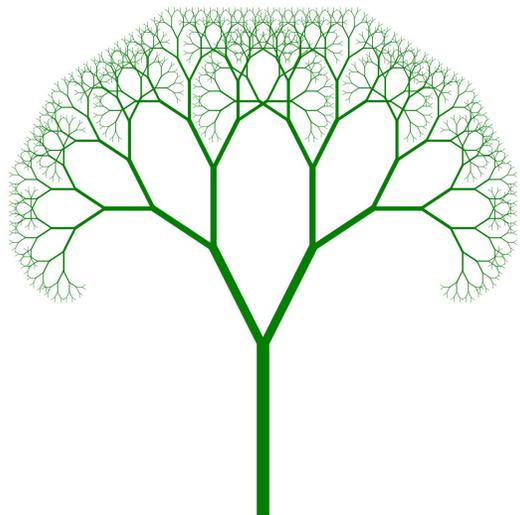
# フラクタル・パセリ錯視

fractal parsley illusion

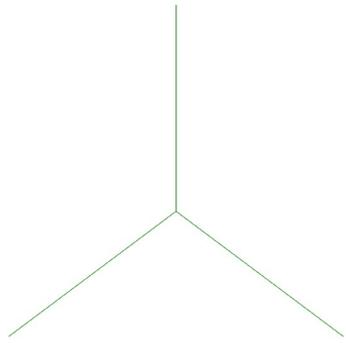
安田 孝 (城西国際大学)  
伊藤 博晃 (神奈川大学)  
渡邊 伸行 (金沢工業大学)  
高木 幸子 (常磐大学)



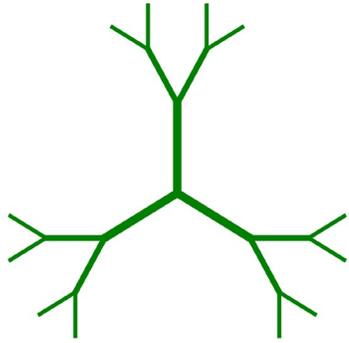
フラクタルで作成したパセリ状のものを $120^\circ$  ずつ回転させ3つ配置すると，上の一つが他の2つよりも小さく見える



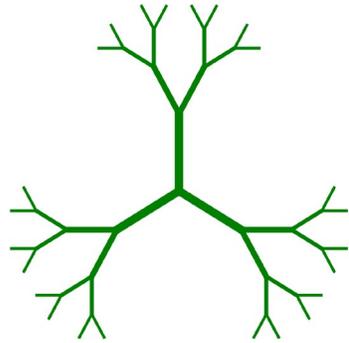
2方向だと，上下・左右・斜めでも同じ大きさに見える



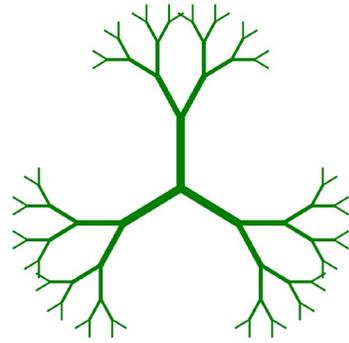
depth = 1



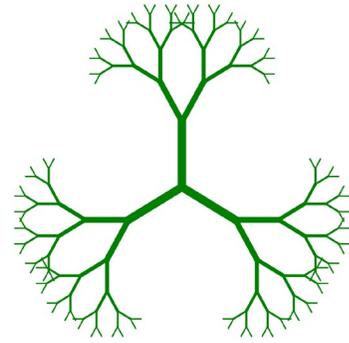
depth = 2



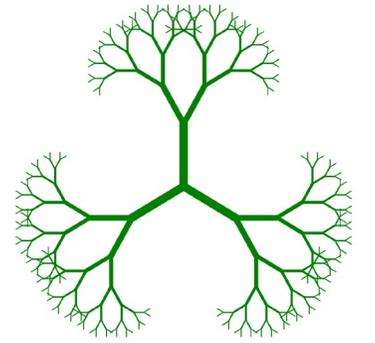
depth = 3



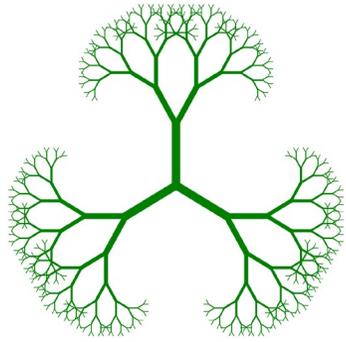
depth = 4



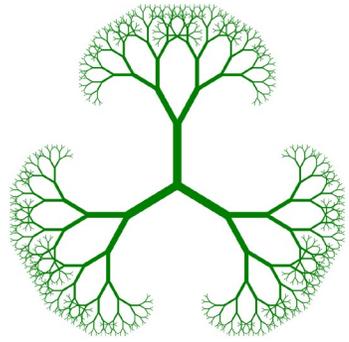
depth = 5



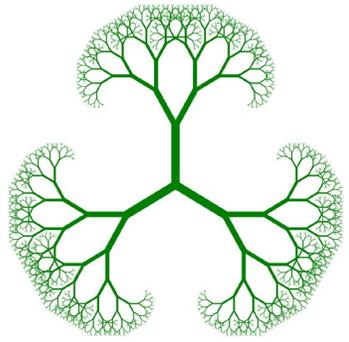
depth = 6



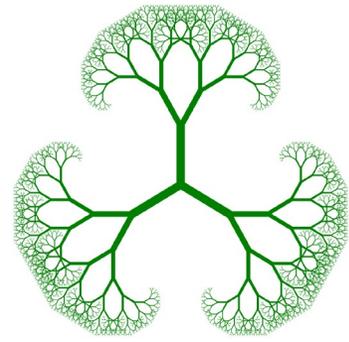
depth = 7



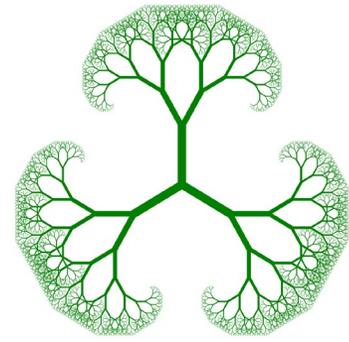
depth = 8



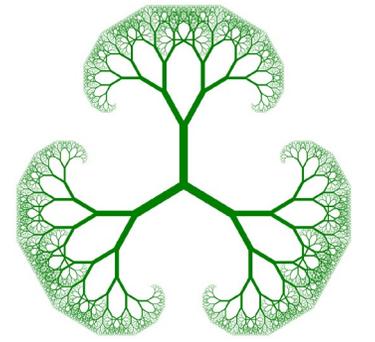
depth = 9



depth = 10

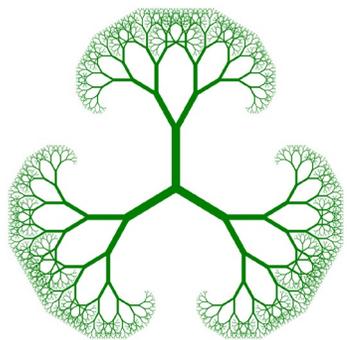


depth = 11

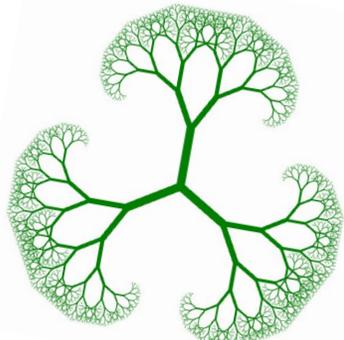


depth = 12

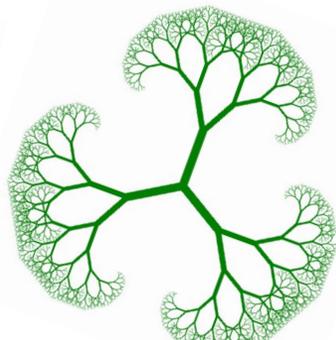
フラクタルの分岐 (depth) が4あたりで、すでに上の一つが小さく見える効果が生じているように見える



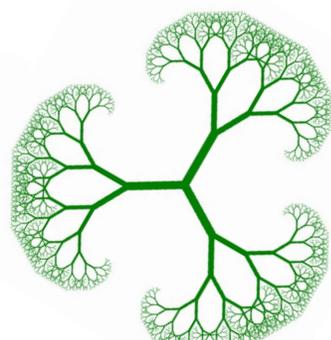
0°



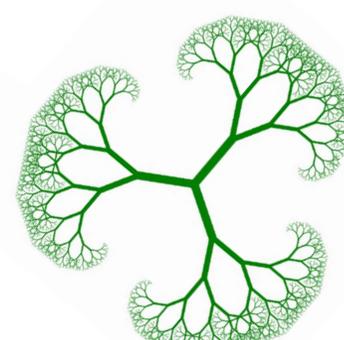
10°



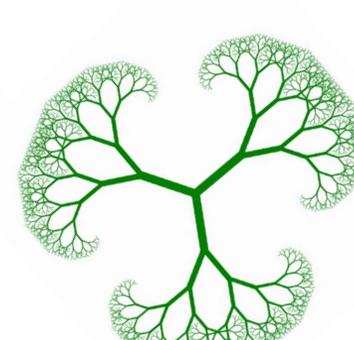
20°



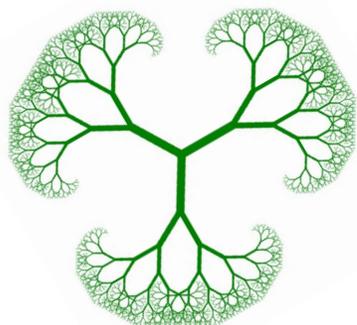
30°



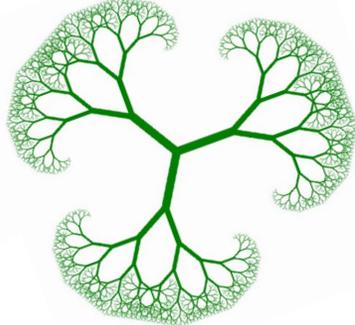
40°



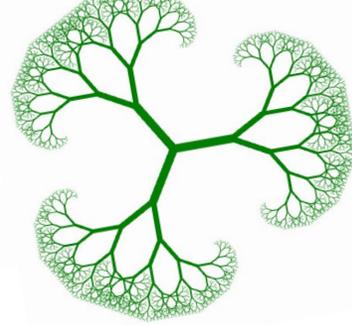
50°



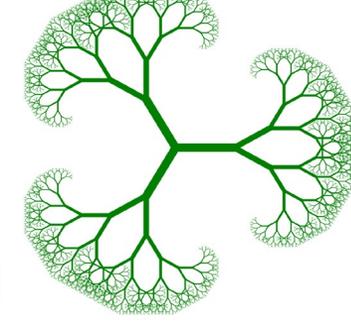
60°



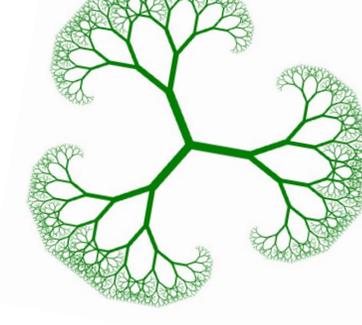
70°



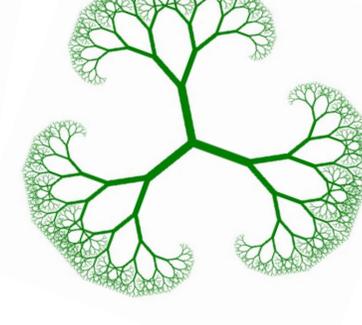
80°



90°

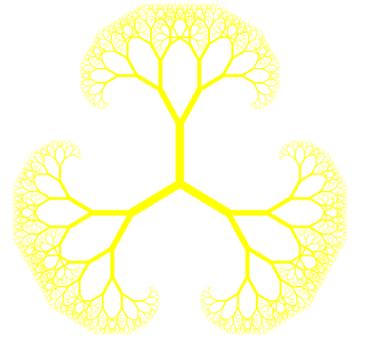
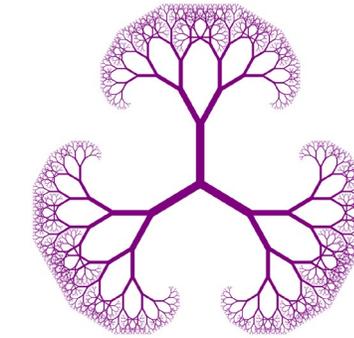
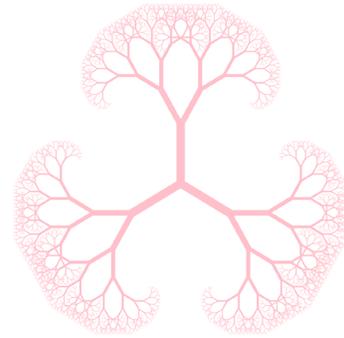
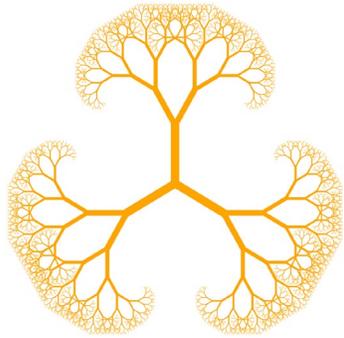
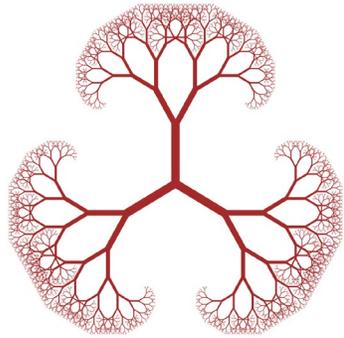
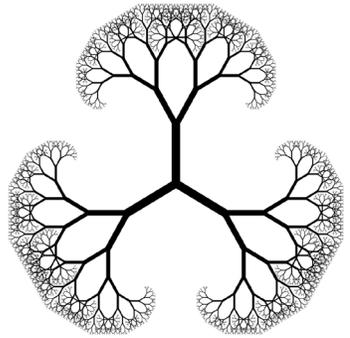
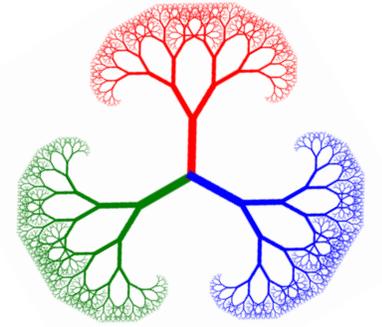
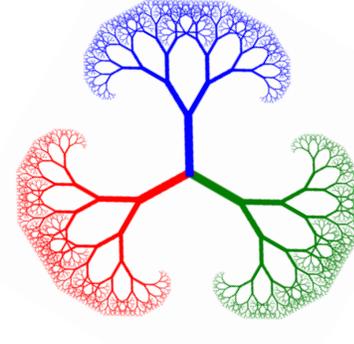
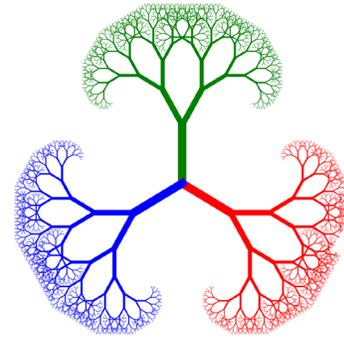
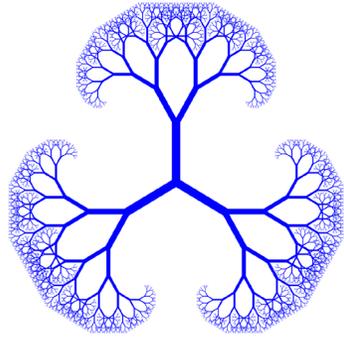
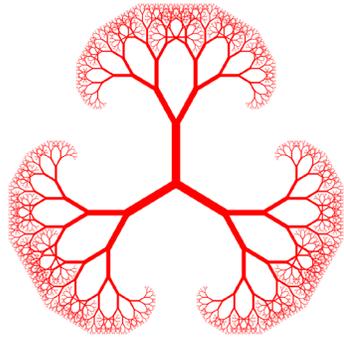
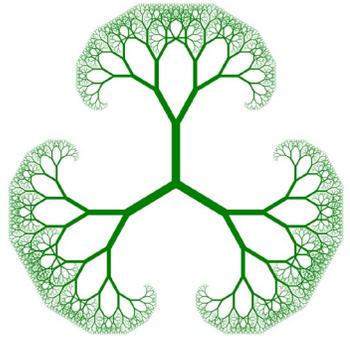


100°

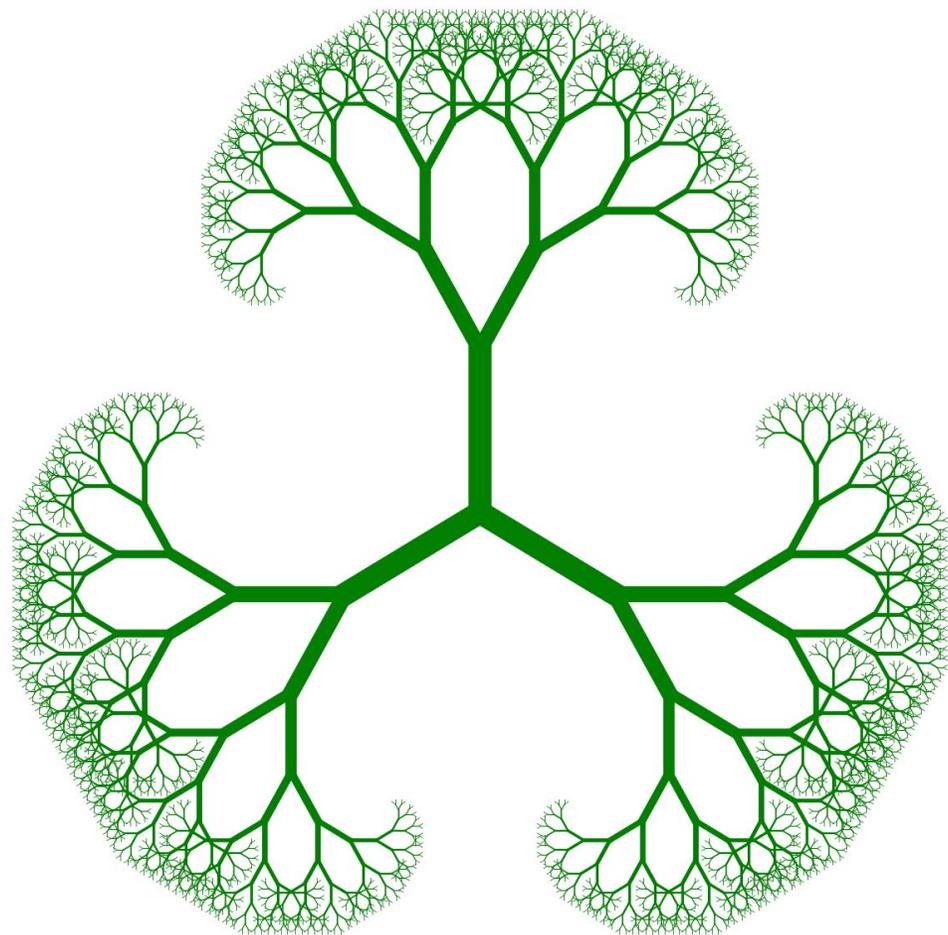


110°

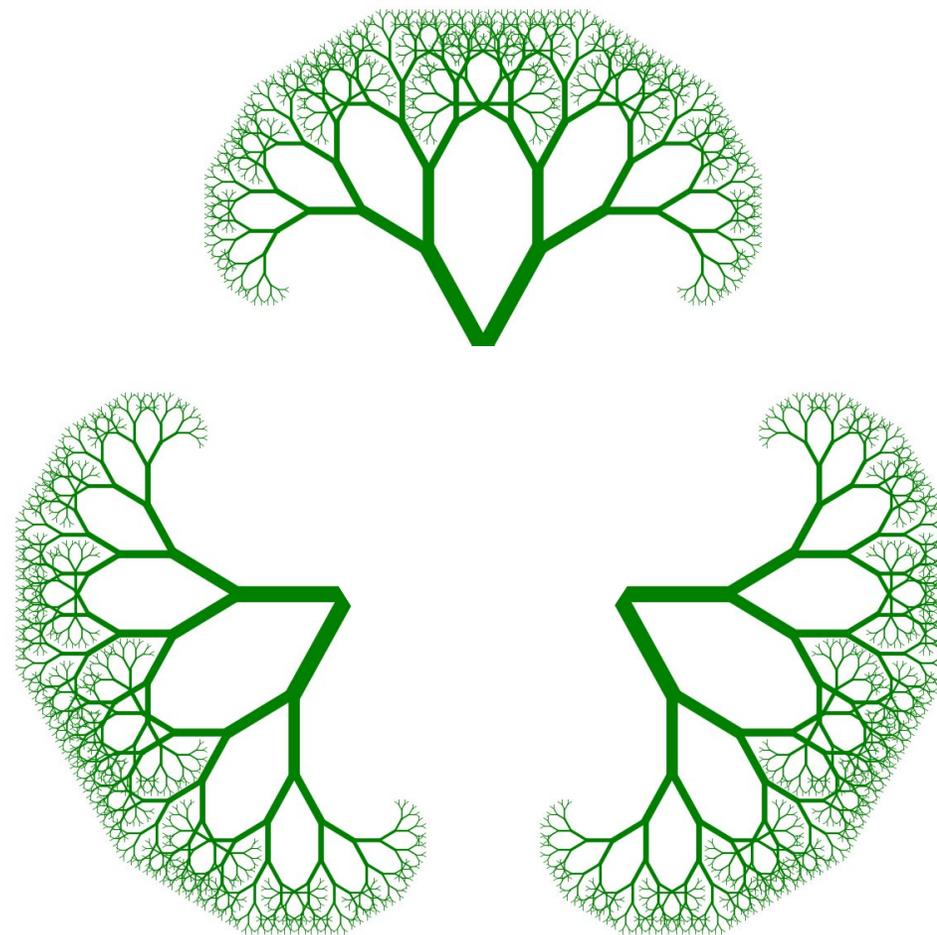
時計回りに10° ずつ回転させると, 30° あたりから効果が弱くなる



色を変えても同様の効果が認められることから、色彩による影響ではなく、形または配置によって生じていると考えられる

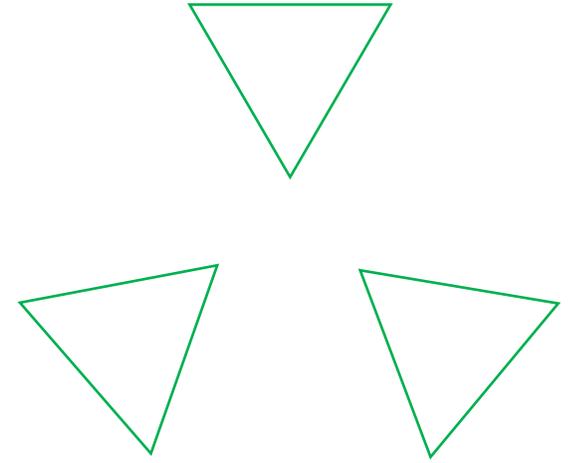
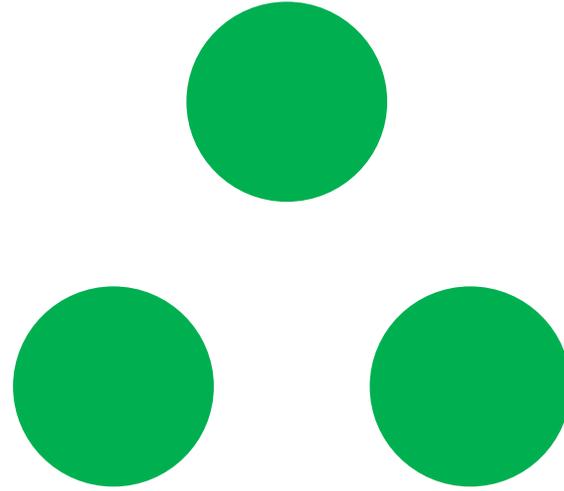
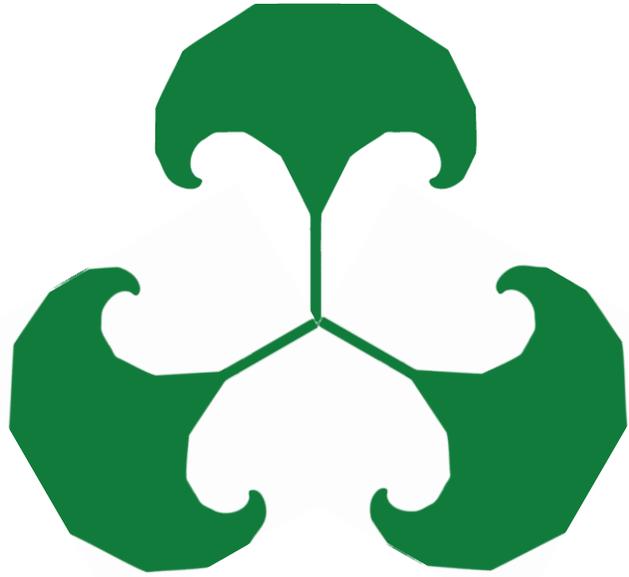


幹あり

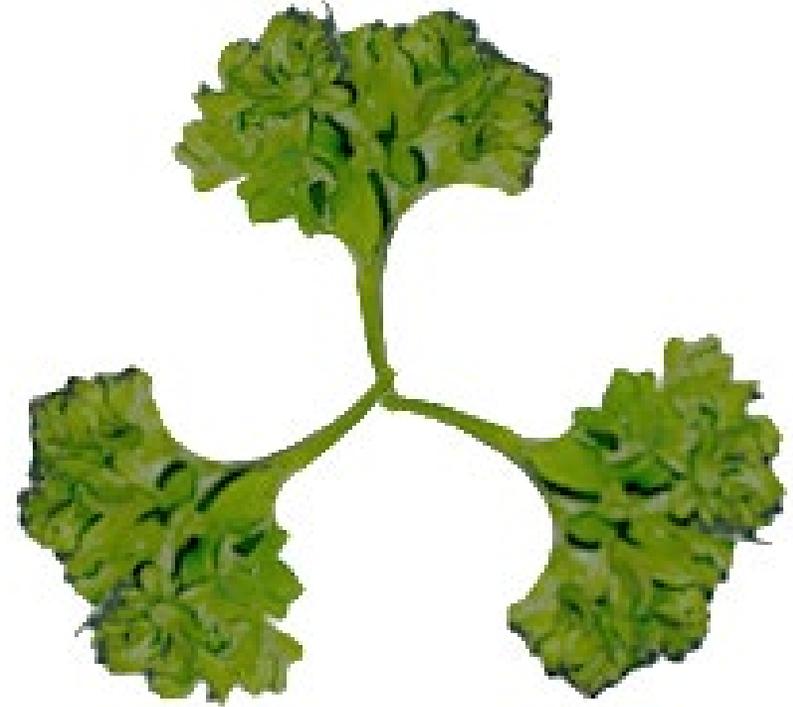
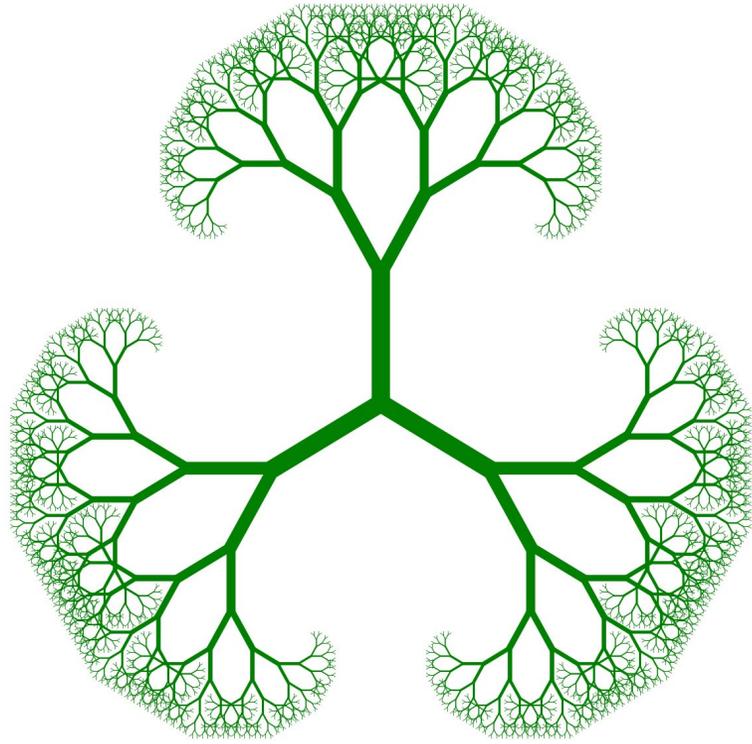


幹なし

「幹」を消しても，上の一つが小さく見える効果は生じる



内部を塗りつぶすと，効果が弱まったように見える。  
また，単純な図形を用いると効果は生じない。



本物のパセリを配置してみたが，効果は生じなかった