IMUB October 2017

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Caltech

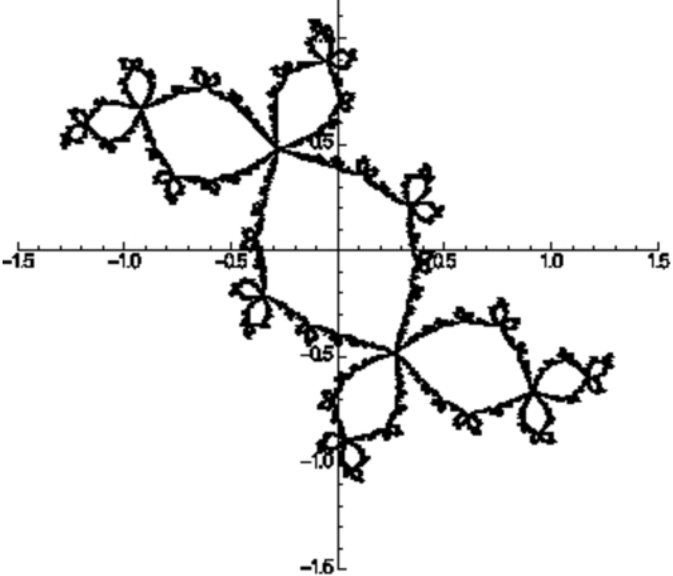

Figure: https://www.math.vt.edu/netmaps/followrabbit.php,
$c \approx -0.122561 + 0.744862i$

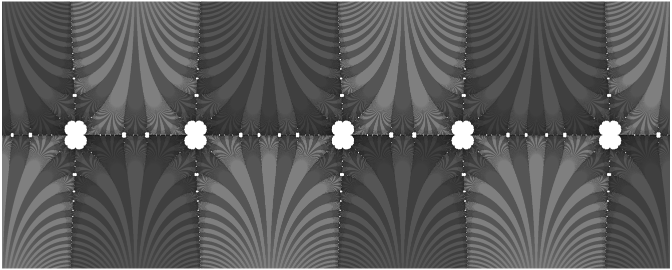

Figure: the dynamical plane of $z + \sin(z) + 2\pi$ (source for picture: Lasse Rempe-Gillen)

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Theorem (Bishop 2014): wandering domains **do** occur in $\mathcal{B}$.

Theorem (Baker 1976): wandering domains exist for some entire functions.

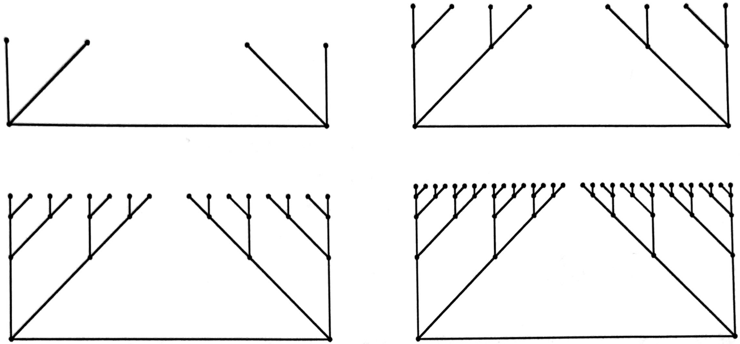


Figure 8. The basic building blocks are pairs of binary trees. Shown are the trees $\widehat{T}_1$, $\widehat{T}_2$, $\widehat{T}_3$ and $\widehat{T}_4$.

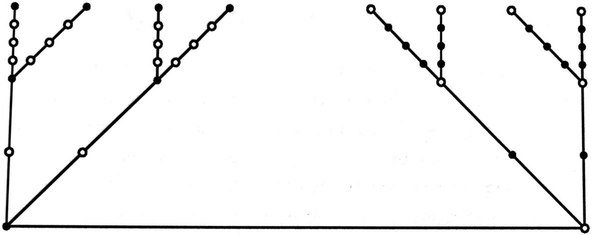
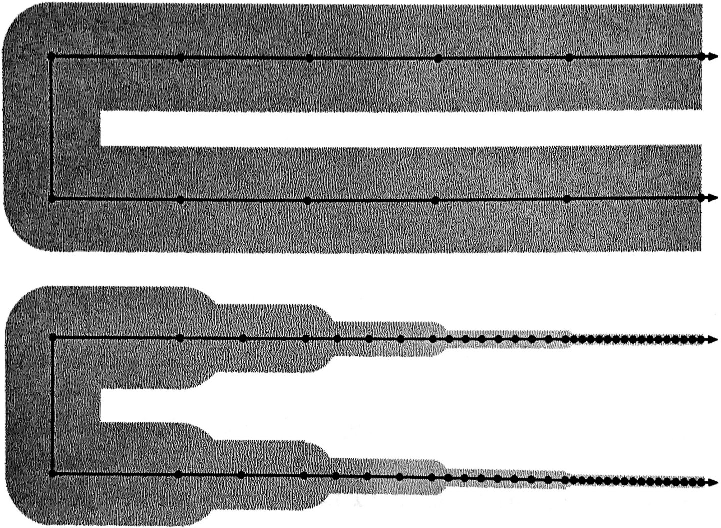


Figure 9. We add vertices to $\widehat{T}_j$ to get T_j. The jth level is divided into 2^j equal subedges by adding extra vertices. We illustrate only the $j=2$ case, since its hard to see individual vertices at higher levels; most of our figures will not show these vertices at all, but their presence is essential to the construction.



References

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Constructing Entire Functions By Quasiconformal Folding
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Nuria Fagella, Sebastien Godillion, and Xavier Jarque (2014)
Wandering domains for composition of entire functions
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