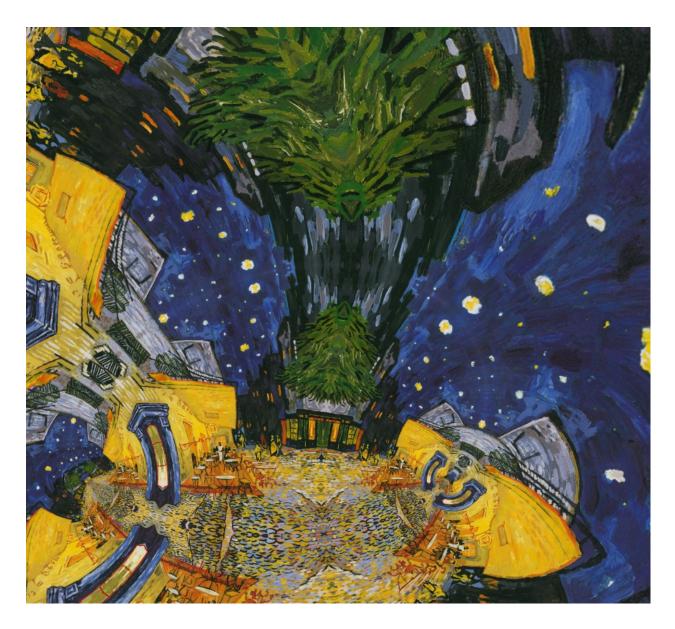
## Van Gogh meets Riemann



Suppose we put the painting *Café Terrace at Night* of *Van Gogh* on  $\mathbb{C}$  so that the height of the painting is  $\pi$ . Now tile the whole of  $\mathbb{C}$  by repeatedly reflecting in the straight lines along the border of the painting. Let us denote the color this gives to a point  $z \in \mathbb{C}$  by c(z). Then the image above is obtained by coloring  $s \in \mathbb{C}$  with the color  $c(\log \zeta(s))$ . Here  $\zeta$  is the *Riemann zeta function*, which is the subject of the most important open problem in mathematics today. The pole at s = 1 and the first "trivial" zero at s = -2 are visible in the picture.

—Bart de Smit, Universiteit Leiden, 2006

