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Review Article

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Why Edge Cities Hit Critical Mass at Five Million Square Feet of Office Space

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1. Introduction

In Garreau's book "Edge City", the author claims that "Why do Edge Cities seem to hit a critical mass at 5 million square feet of leasable office space? No one knows exactly at a theoretical level". pg 31 [1].

The Reason can be Explained by Astrotheology:

$t^2-t-1=2t-1$
$t=3$: $E=5 \Rightarrow 5$ Million sq ft
$t=KE=1/2Mv^2$
$3=1/2(4)v^2$
$1.5=v^2=1/G$

$\Delta t=\pi-1$

$1/G=7(\pi-1)$
$M=\text{Ln } t$
$=\text{Ln } 1=0 \Rightarrow$critical mass $dM/dt=1/t=1/1=1$
$dM/dt=dE/dt=2t-1=2(1)-1=1$
$t^2-t-1=2t-1$
$2t-1=1$
$t=1$

$1^2-1-1=-1=E \Rightarrow t=0$ GMP
$M=\text{Ln } t=\text{Ln } (1/2)=-0.693$
$M=\text{Ln } t=\text{Ln } 2=0.693$
$\Delta M=0.693+(-0.693)=0$

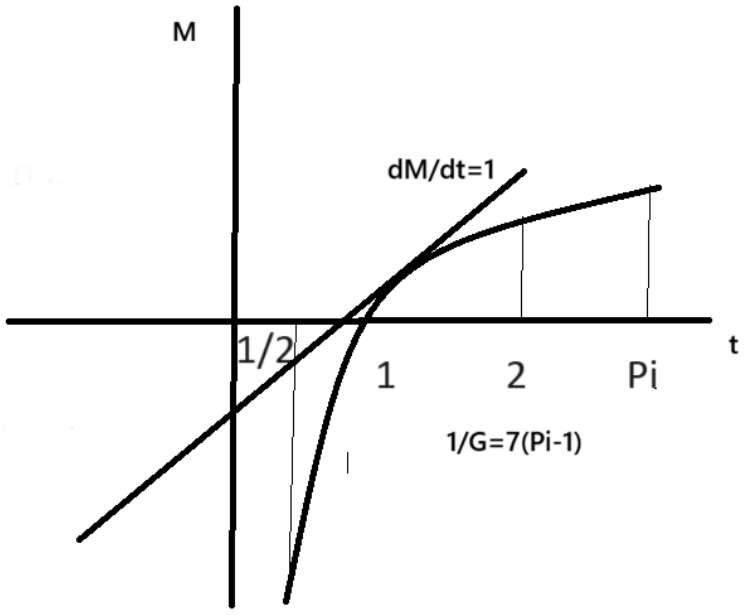

Figure 1: The Mass -Time Plot of the Function from Astrotheology

At t=1/2
$t^2-t-1=(1/2)^2-(1/2)-1=-1.25=Emin$
Catalytic E=-0.25 GMP

dM/dt/ M=1/(-0.250)
1PERSON /250 Square Feet of Office Space

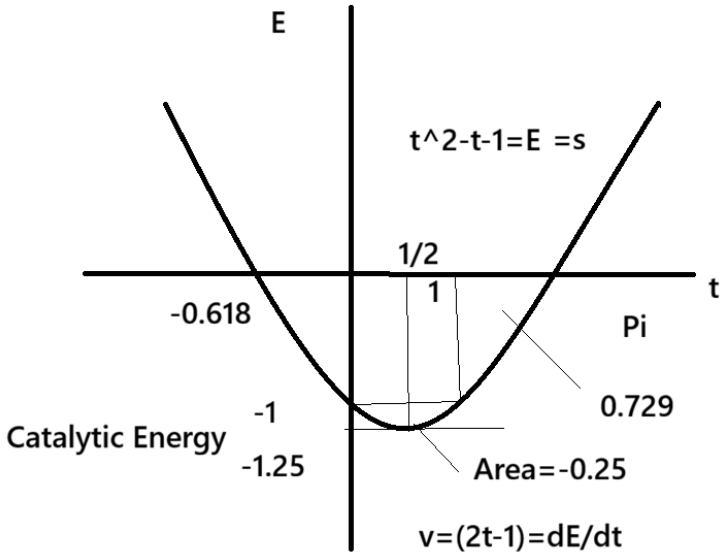

Figure 2: The Golden Mean Parabola is Ubiquitous in Nature

1/4500 for factory space
$0.707/(\pi/4)=1/180=1/\pi$
1/t=Et
$1/E=t^2$
$t=t^2$
t=1

1/4500.

References

1. Garreau, J., Edge City: Life on the New Frontier. NY: Random House :1991.