

Figures algorithm

This notebook details the procedure undertaken to produce figures presented in the first part of the results section of the chapter.

The base figure comes from Grove (2011, p.311, fig.3). The original version looks like this:

In [1]:

```
from IPython.display import Image
Image(filename='/Users/iarlg09/Dropbox/IZA/PHD/case_studies/variability_case_s
tudy/notebooks/images/Grove2011.png')
```

Out[1]:

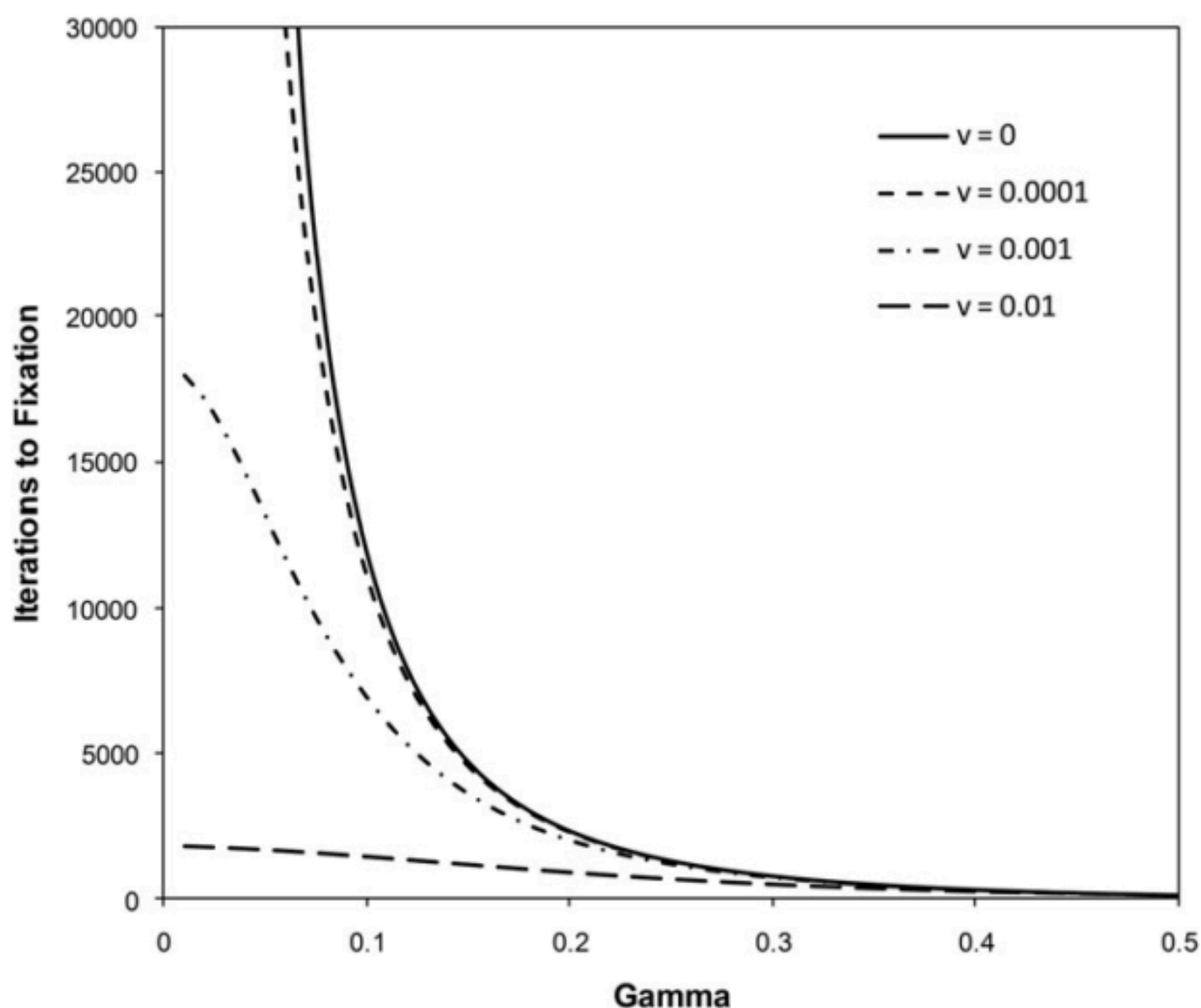


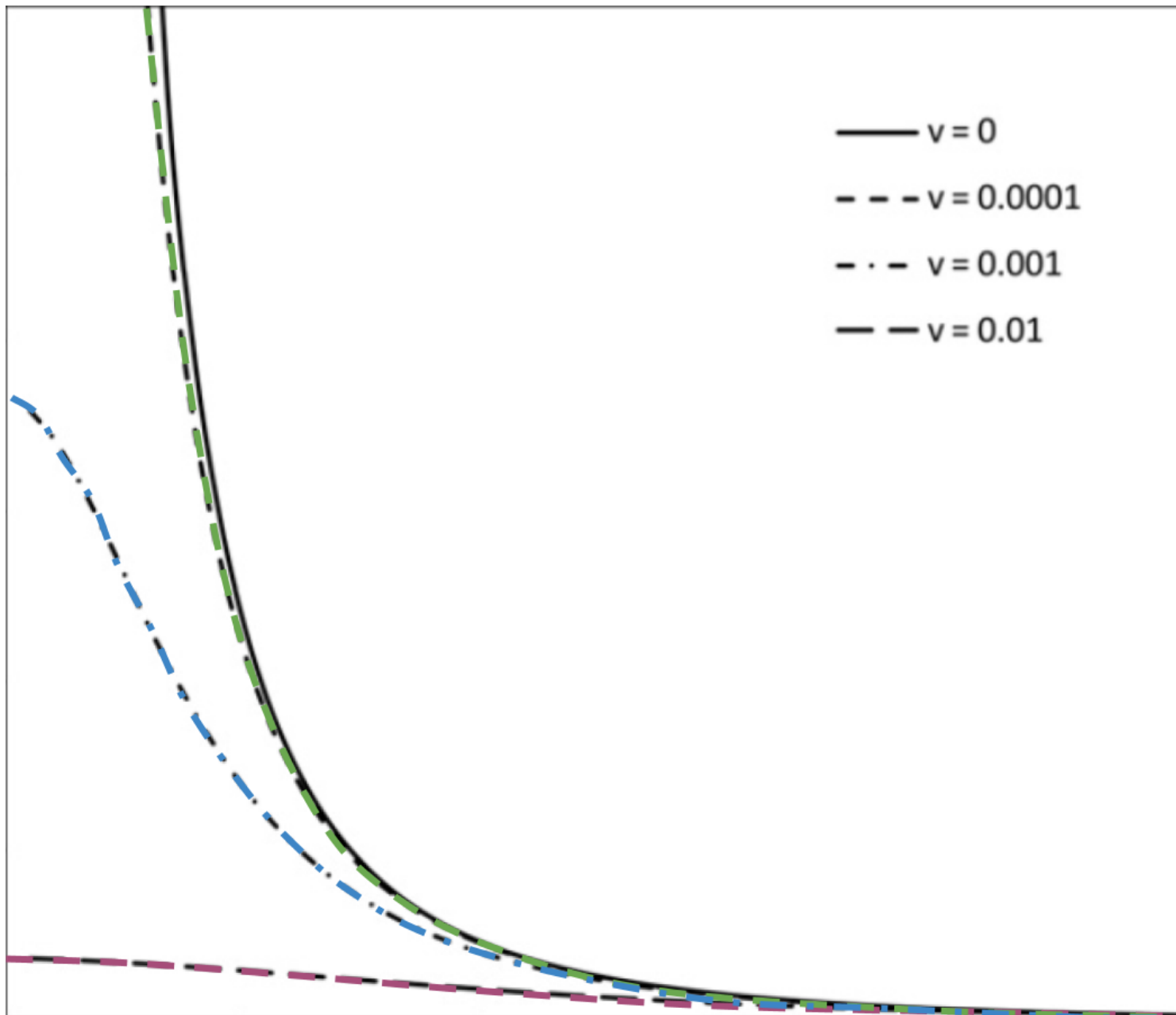
Figure 3. Time to fixation plotted against γ for a generalist ($\nu = 0$) and three versatilst strategies of differing strength. Those strategies for which $\nu > 0$ can all be considered to be examples of 'versatilisim'.

To make the graph clearer the lines were coloured using graphic software.

In [5]:

```
Image(filename='/Users/iarl909/Dropbox/IZA/PHD/case_studies/variability_case_study/notebooks/images/clean_graph.png')
```

Out[5]:

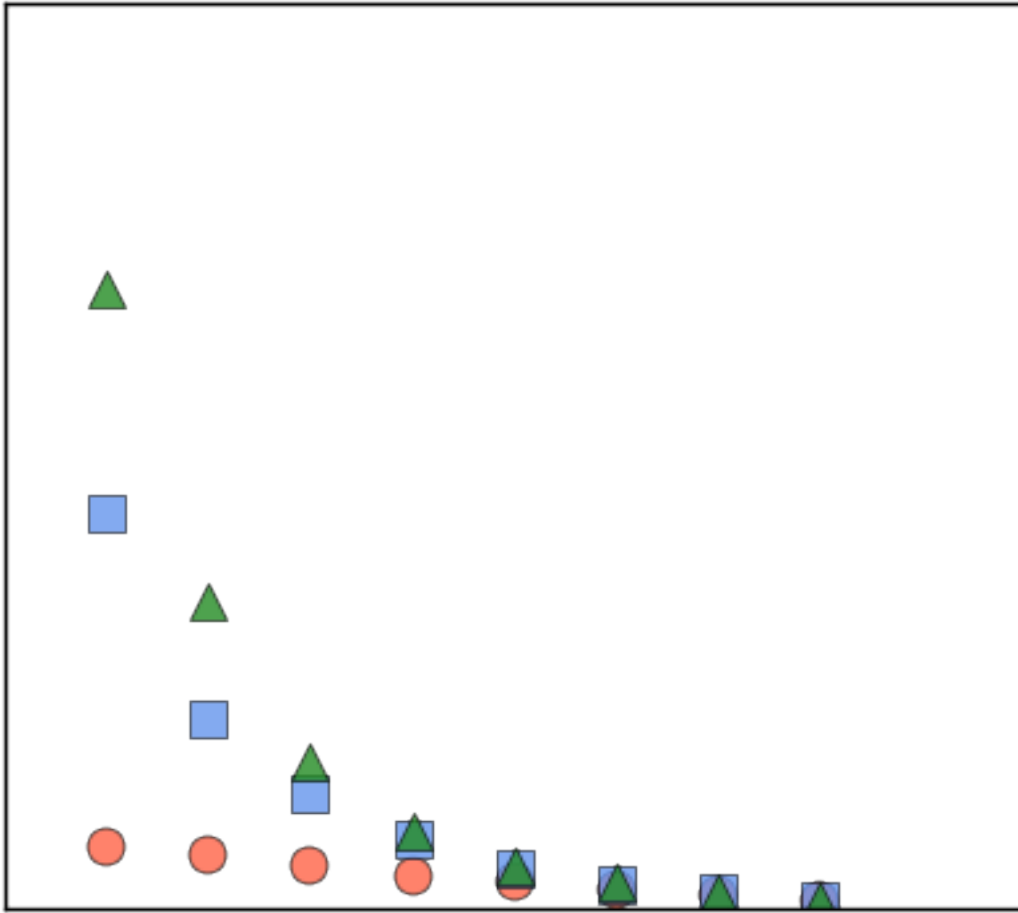


The results were visualised using a scatter plot function of matplotlib (see Appendix xxx.Code and pseudocode). Since the size of the axis was known, the images were generated maintaining the same proportion and size. This his how the results looked like:

In [6]:

```
Image(filename='/Users/iarlg09/Dropbox/IZA/PHD/case_studies/variability_case_study/notebooks/images/replication.png')
```

Out[6]:

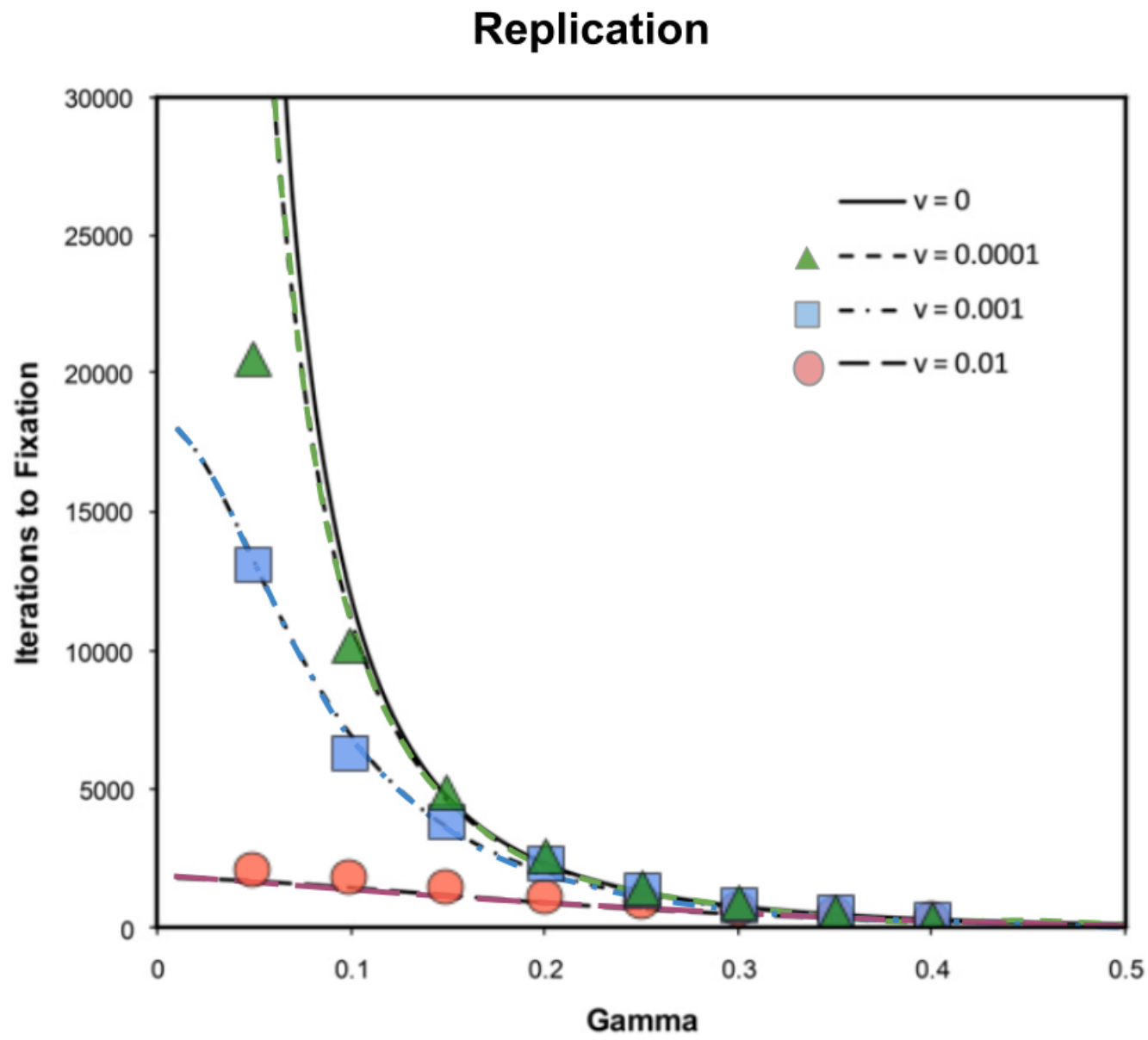


The two were then manually overlaid using the border as a guide. Additional elements were added in the graphic software resulting in the following figure:

In [7]:

```
Image(filename='/Users/iarlg09/Dropbox/IZA/PHD/case_studies/variability_case_study/notebooks/images/Replication_full.png')
```

Out[7]:



In []: