

```
In[*]:= rawfig2a = Import[NotebookDirectory[] <> "fig2a_data.csv", "CSV"];
```

Equilibrium calculation

```
In[69]:= A[u_, α_, γ_] := 
$$\frac{\frac{u}{(1-u)} + 1 - \gamma}{\alpha \gamma};$$

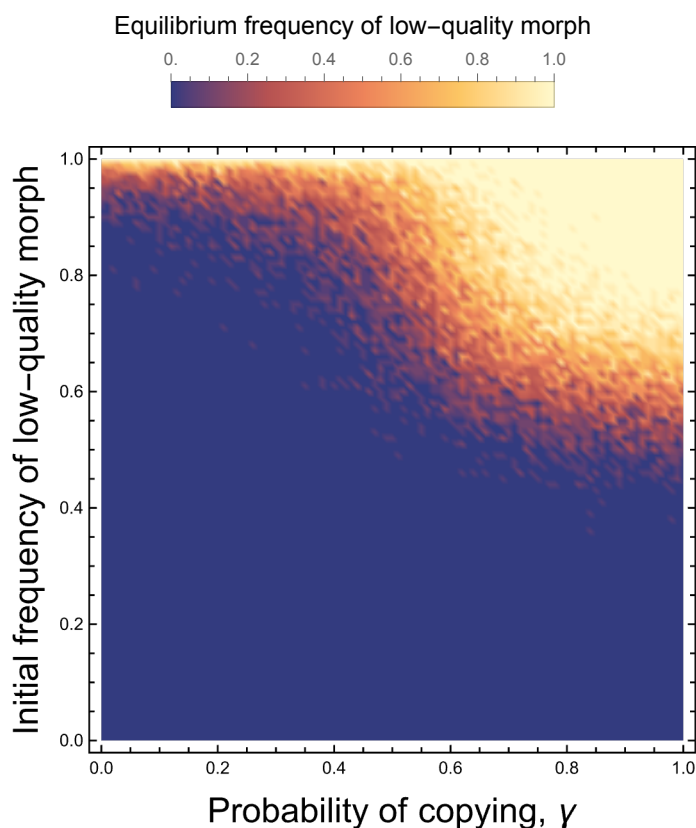
```

$$\text{equilibrium}[r_, \beta_, u_, \alpha_, \gamma_] := \frac{1}{\left(\frac{r+1}{A[u, \alpha, \gamma] (r-1) + r}\right)^{1/\beta} + 1};$$

Fig2a

```
In[*]:= ListDensityPlot[rawfig2a[[2 ;;]], PlotRange -> All,
  PlotLegends -> Placed[BarLegend[Automatic, LegendMargins -> {{0, 0}, {10, 5}},
    LegendLabel -> "Equilibrium frequency of low-quality morph",
    LabelStyle -> {FontFamily -> "Calibri"}], Above],
  Frame -> True, FrameStyle -> Directive[Black, Thickness[0.003]],
  FrameLabel -> {Style["Probability of copying, γ", FontFamily -> "Calibri", 18],
    Style["Initial frequency of low-quality morph", FontFamily -> "Calibri", 18]]}
```

Out[*] =



```
In[73]:= q2 = 3; q1 = 2;  $\beta$  = 2; u = 0.1;  $\alpha$  = 0.8;
```

```
Plot[equilibrium[q2 / q1,  $\beta$ , u,  $\alpha$ ,  $\gamma$ ], { $\gamma$ , 0, 1}, PlotRange -> All]
```

```
Out[74]=
```

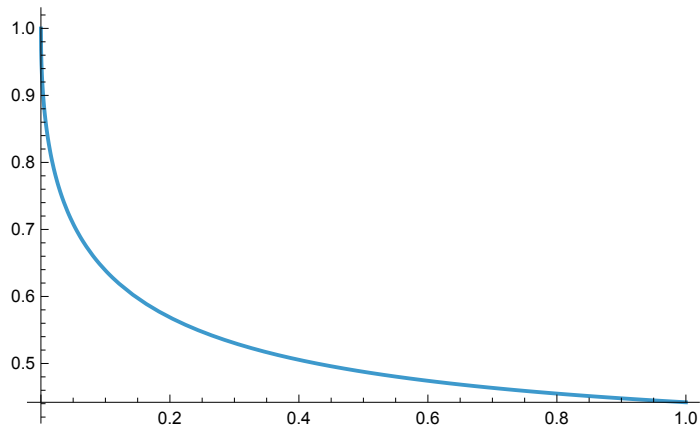


Fig2b

```
In[*]:= rawfig2b = Import[NotebookDirectory[] <> "fig2b_data.csv", "CSV"];
```

```
In[*]:= rawfig2b[[2 ;; 10]]
```

```
Out[*]=
```

```
{{0., 0., 0.}, {0., 0.01, 0.0005}, {0., 0.02, 0.004},  
 {0., 0.03, 0.006}, {0., 0.04, 0.0075}, {0., 0.05, 0.0085},  
 {0., 0.06, 0.0095}, {0., 0.07, 0.0105}, {0., 0.08, 0.011}}
```

```

In[*]:= ListDensityPlot[rawfig2b[[2 ;;]], PlotRange -> All,
  PlotLegends -> Placed[BarLegend[Automatic,
    LegendMargins -> {{0, 0}, {10, 5}}, LegendLabel -> "Normalised fixation time",
    LabelStyle -> {FontFamily -> "Calibri"}], Above],
  Frame -> True, FrameStyle -> Directive[Black, Thickness[0.003]],
  FrameLabel -> {Style["Probability of copying,  $\gamma$ ", FontFamily -> "Calibri", 18],
    Style["Initial frequency of low-quality morph", FontFamily -> "Calibri", 18]}]

```

Out[*]=

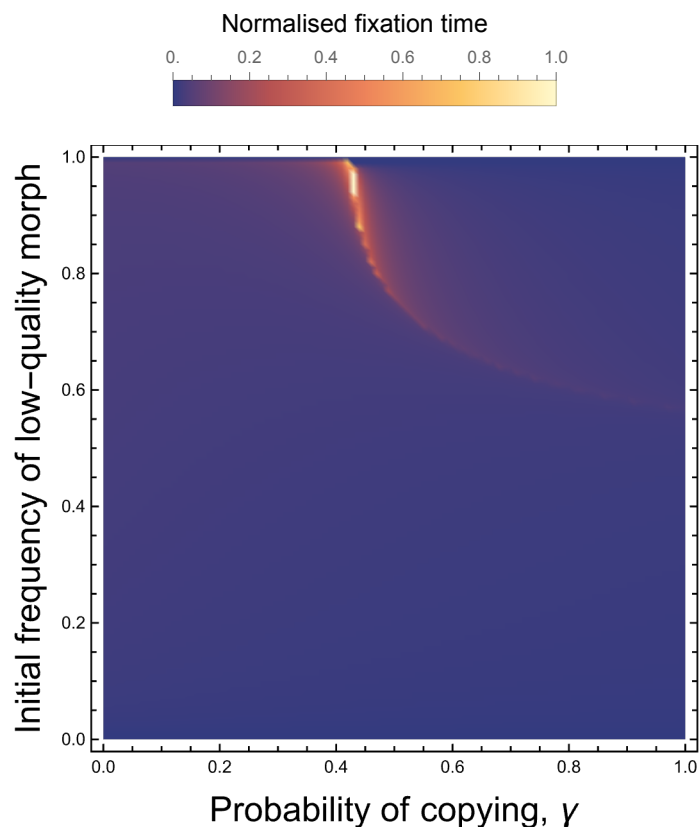


Fig 2c

```

In[*]:= rawfig2c = Import[NotebookDirectory[] <> "fig2c_data.csv", "CSV"];

```

```

In[ ]:= ListDensityPlot[rawfig2c[[2 ;;]], PlotRange -> All,
  PlotLegends -> Placed[BarLegend[Automatic, LegendMargins -> {{0, 0}, {10, 5}},
    LegendLabel -> "Absolute difference in modified qualities",
    LabelStyle -> {FontFamily -> "Calibri"}], Above],
  Frame -> True, FrameStyle -> Directive[Black, Thickness[0.003]],
  FrameLabel -> {Style["Probability of copying,  $\gamma$ ", FontFamily -> "Calibri", 18],
    Style["Initial frequency of low-quality morph", FontFamily -> "Calibri", 18]}]

```

Out[]:=

