Relocation choice for different homophily preferences: hybrid scenarios for Schelling Model

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Annex A for ß secondary = ß dominant * w (df_secf.csv) and ideas

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Annex A: ß secondary as function of ß dominant

In this version of the model (e_v_rum_secfdom.nlogo), secondary preference is derived from dominant preference

$$\beta\ secondary = \beta\ dominant * w$$

with $w \in [0, 1]$. For $w = 0$, ß secondary is equal 0; for $w = 1$, ß secondary is equal to ß dominant.

Fig. 1 compares increase in secondary preference for liberals (top row) and conservatives (bottom row) for all ranges of ß dominant which is reported on the x-axis. It reports 3 conditions: $w = 0$, $w = 1$ and the intermediate condition $w = 0.5$, i.e. ß secondary is half of ß dominant.

Fig: 2 focuses on change in secondary ß ethnic of liberals for all levels of w, showing results for conservatives (top row) and liberals (bottom row). Fig: 3 repeats for change in secondary ß value of conservatives

Fig: 2 and Fig: 3 show all levels of w for secondary preference of liberals and conservatives.

Fig. 1 is a filtered and a more text-wise combination of Fig: 2 and Fig: 3. In all conditions we have too much information in the figures. For sake of simplicity we could decide:

1) Keep Fig. 1 in the text, deleting what are now Fig: 4, equal to $w = 0$, and 5 equal to $w = 1$ (both reported at end of document), leaving Fig: 2 and Fig: 3 in an Annex

2) Leave as it is now with 4 and 5, and still Fig: 2 and Fig: 3 in an Annex

I have a preference for solution 1)

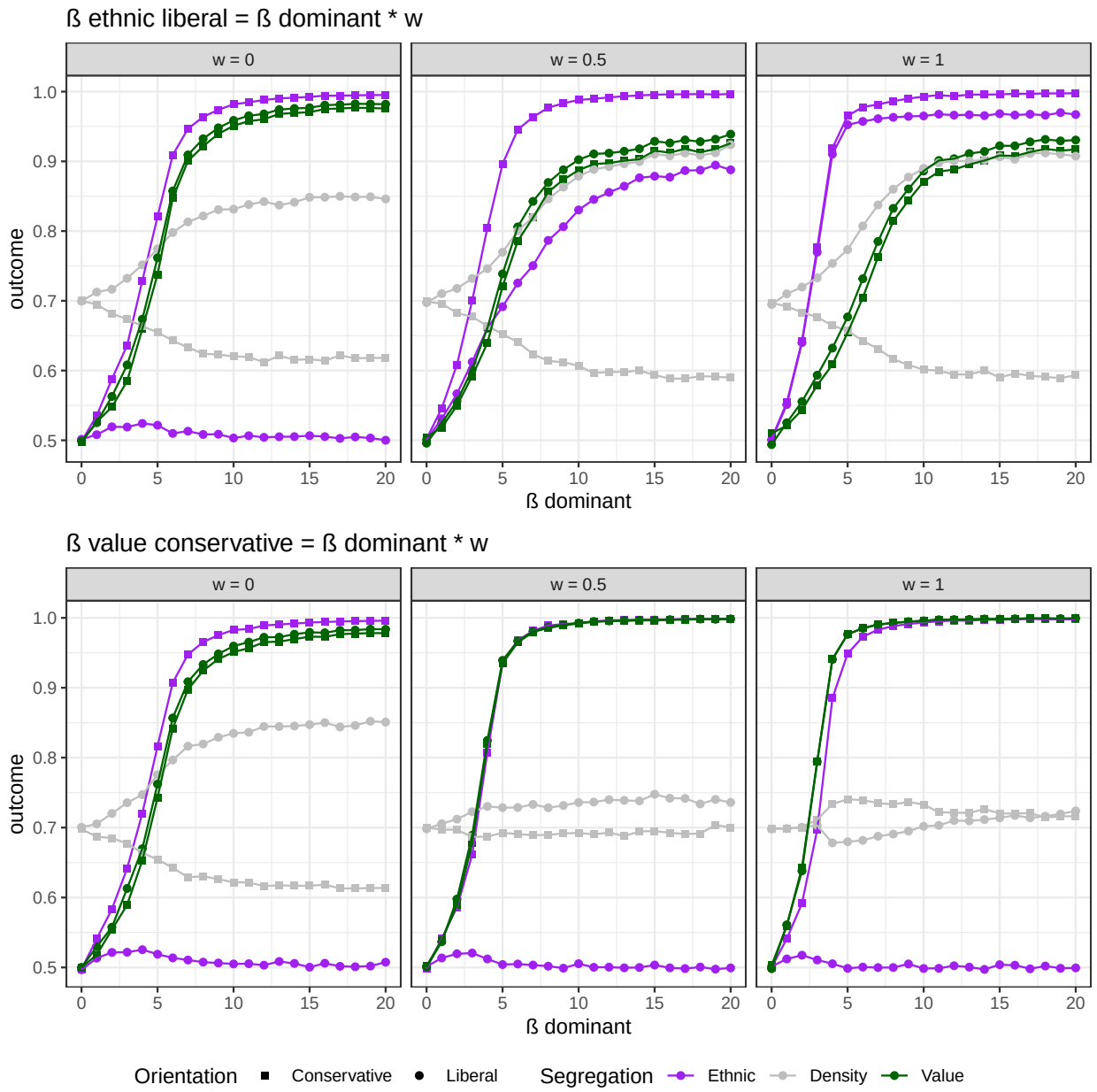

Figure 1: Baseline condition, ß secondary as function of ß dominant. X-axis reports ß dominant for all agents (value for liberals and ethnic for conservative). In the top row, change in secondary ß ethnic of liberals (secondary ß value of conservative = 0 in all conditions). In the bottom row, change in secondary ß value of conservatives (secondary ß ethnic of liberals = 0 in all conditions). Each panel refers to one level of w

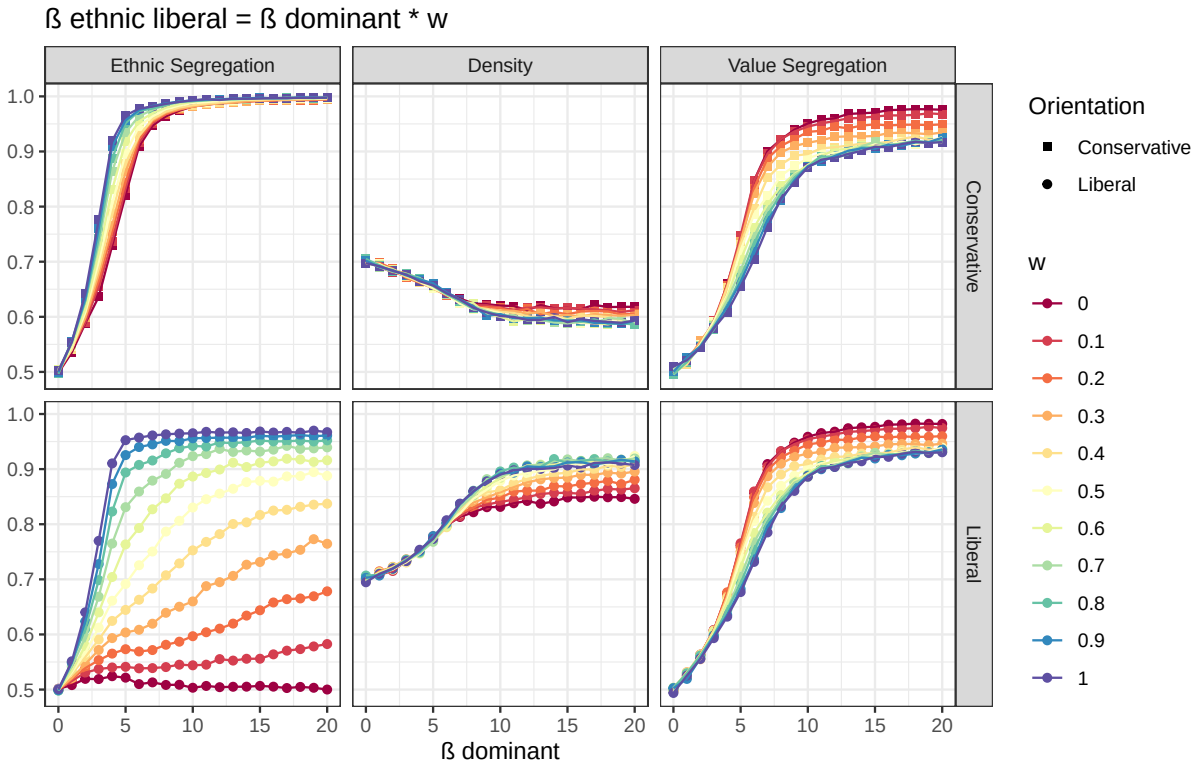

Figure 2: Focus on secondary ß ethnic of liberals for all levels of w. On x-axis is the increase in ß dominant for all agents (value for liberals and ethnic for conservative; secondary ß value of conservative = 0 in all conditions). Each panel reports one outcome: ethnic segregation, density, value segregation. On the top row, change in outcome of conservatives is reported. On the bottom row, change in outcome of liberals is reported

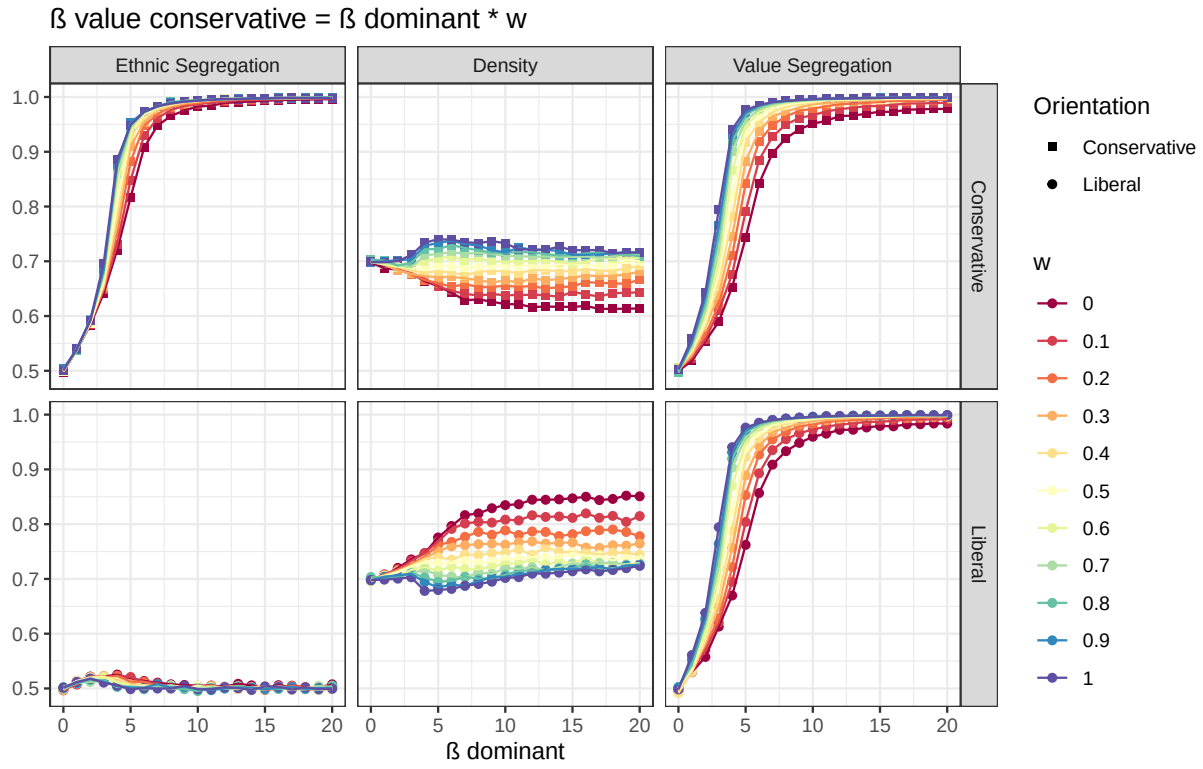

Figure 3: Focus on secondary ß value of conservatives for all levels of w. On x-axis is the increase in ß dominant for all agents (value for liberals and ethnic for conservative; secondary ß ethnic of liberals = 0 in all conditions). Each panel reports one outcome: ethnic segregation, density, value segregation. On the top row, change in outcome of conservatives is reported. On the bottom row, change in outcome of liberals is reported

Fig: 4 and 5 as now appear in the manuscript and we discussed. They might be substituted from figures above

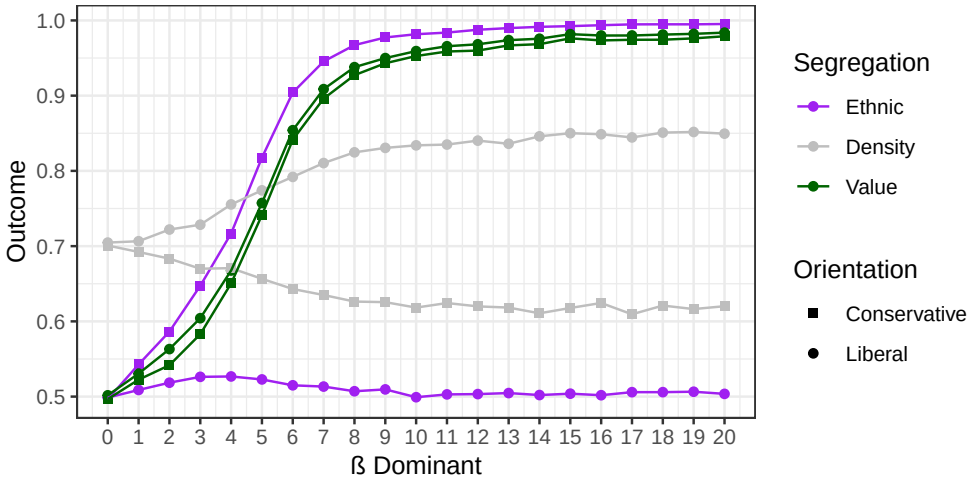

Figure 4: Baseline condition, ß dominant preference (ethnic for conservative, value for liberals on the x-axis), ß secondary preference (value conservative, ethnic liberal) equal to 0

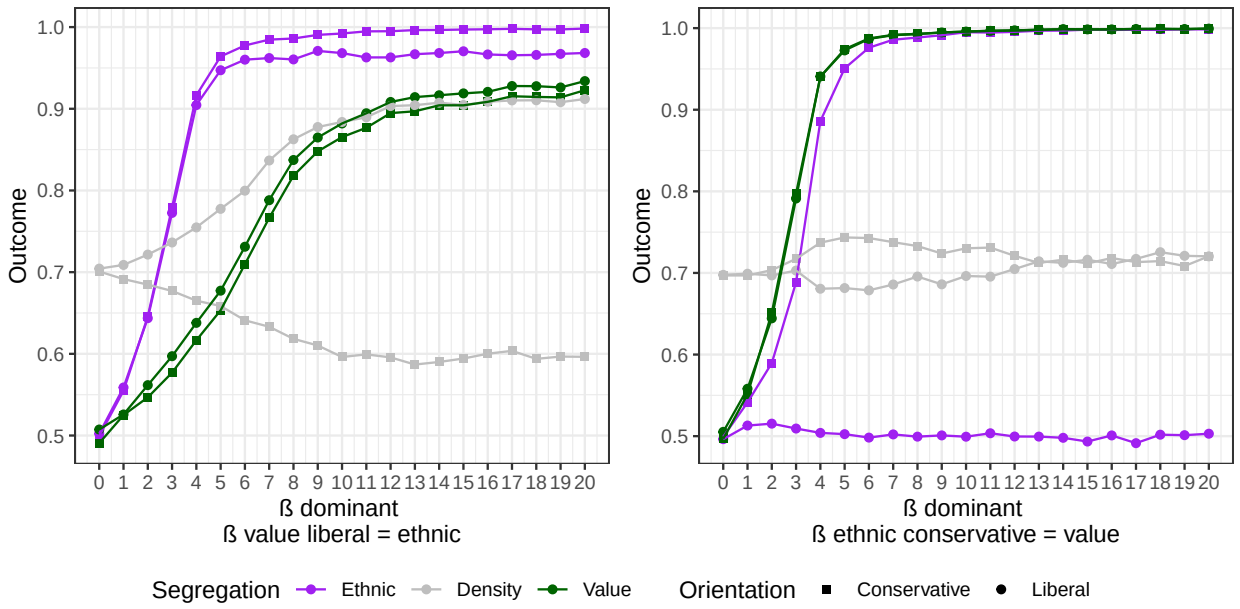

Figure 5: Baseline condition, Effect of agents holding ß dominant = ß secondary, comparison of different preferences. On the x-axis, increase ß dominant for all agent. Left panel: liberals hold value preference (dominant) equal to ethnic preference (secondary); left panel: conservatives subscribe only to ethnic preference. Right panel: liberals hold ethnic preference (dominant) equal to value preference (secondary)