

Figure 3. Example of the dependence of the dynamic of the regions on the amount of possible traits. The runs were generated on a 10x10 grid with a cultural vector with ten features. Results were averaged over 100 simulations.

As already stated, the initial amount of regions is much smaller than for the zones. Here also the initial count of regions depends on the number of traits. The dynamics with which the number of regions evolve is quite similar though and only differs slightly in their final number. This slight difference in the final count also applies to the zones in Fig. 2.

Of course the dynamics are not only affected by the number of possible traits but also by the length of the cultural vector, the amount of features it contains. In Fig. 4 the final amount of zones on a 10x10 grid for the respective numbers of traits and features are shown. Note that since the fixed point is reached when each agent has only neighbors of 100 percent or 0 percent similarity, the final number of zones also represents the final region count.

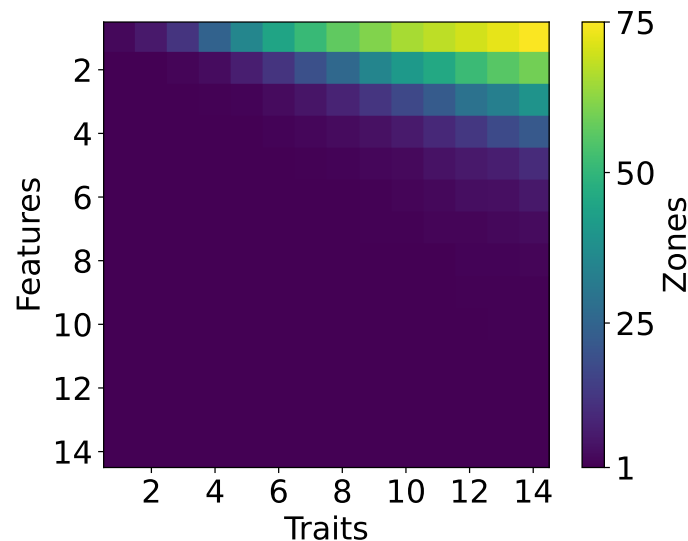


Figure 4. Final amount of zones on a 10x10 grid for a range of traits and features. Results were averaged over 100 simulations.

For most combinations there is a single cultural vector that will prevail. With an increasing number of traits the number of zones/regions also increases while an increase of features has the opposite result. At first this might seem counter intuitive as with more features the total number of possible cultural vectors that can be established increases, but this contradiction can easily be resolved. For more features the