

0.1 Resources

Resources convert from Vicky RGOs. In particular, the `crude_oil`, `metal`, `rare_materials`, and `energy` fields of `config.txt` regulate how much weight each Vicky resource has for the eponymous HoI resource; each RGO then has this weight (if not listed, it is zero) times its `last_income` field.

0.2 Manpower and leadership

All POPs listed in the `fightingClasses` object have a redistribution weight for manpower equal to their size, *unless* they work in an RGO type listed in the `manpower` object, in which case their weight is calculated as for a resource. Notice that by default the `manpower` object contains RGOs that have nonzero weights for resource, and the weights in it are all zero. The effect is that labourers who work in resource-giving RGOs do not give manpower.

Leadership is redistributed according to the size of the POP types listed in the `officerClasses` object.

0.3 Industry

Vicky factories convert to HoI industrial capacity with a weight proportional to their profit; the world total of IC remains what it is in the input file. Unemployed and subsidised workers count as making `minimumProfitRate` for weighting purposes, but the IC they create starts damaged. Employed workers who make a positive profit less than `minimumProfitRate` count as making it; this means that it is never useful to close a profitable factory, though there is some advantage to having factories that are only just barely profitable.

0.4 Governments

Each converted nation gets the government of the historical nation it most closely resembles, provided no other nation resembles it even more. That is, a resemblance is calculated for each pair of converted and historical nations. The highest resemblance is then assigned, then the next highest for which neither converted or historical nation has already been used, and so on until all converted nations have a government. For example, suppose the converted nations are SWE, DEN, and NOR; and the historical nations are GER, ENG, and FRA. Suppose further that the resemblances are thus:

```
SWE - GER: 10
SWE - ENG: 8
SWE - FRA: 3
DEN - GER: 9
```

```
DEN - ENG: 7
DEN - FRA: 2
NOR - GER: 2
NOR - ENG: 4
NOR - FRA: 3
```

Sorting this list from highest to lowest, we get:

```
SWE - GER: 10
DEN - GER: 9
SWE - ENG: 8
DEN - ENG: 7
NOR - ENG: 4
NOR - FRA: 3
SWE - FRA: 3
DEN - FRA: 2
NOR - GER: 2
```

Thus, SWE gets the historical GER government, and SWE and GER are struck from the list, leaving:

```
DEN - ENG: 7
NOR - ENG: 4
NOR - FRA: 3
DEN - FRA: 2
```

Then, DEN gets the historical ENG government and these tags are struck, leaving only the final resemblance, from which NOR is assigned the FRA government.

Resemblance is calculated from the `govResemblance` object in the configuration file. For example, consider the resemblance object to Sweden:

```
SWE = {
  scale = 0.5
  government = {
    fascist_dictatorship = 0
    proletarian_dictatorship = 0
    presidential_dictatorship = 0
    bourgeois_dictatorship = 0
    absolute_monarchy = 0.1
    prussian_constitutionalism = 0.8
    hms_government = 0.5
    democracy = 0.8
  }
}
```

This says that a Victoria nation gets 0.8 resemblance points to Sweden for having the `prussian_constitutionalism` government, 0.5 for `hmc_government`,

and so on. Resemblances are multiplied by the `scale`, which is 1 by default and smaller for historically-minor countries like Sweden; this means that a country which equally resembles Germany and Sweden will get the German government if it is available. In addition, human countries get a bonus of `humanFactor` to all resemblances listed in the config file, to advantage them over AI minors in the scramble for interesting governments. There is also a tiny random factor to break ties.

Fields marked ‘numerical’, such as plurality, create a resemblance of their `value` key times the number in the Victoria country. Fields with a ‘target’ keyword look in the nested sub-object of the Victoria nation rather than the top level.

0.5 Leaders

Each nation, in HoI and Vicky, is considered as a point in army-navy space; its coordinates are given by its strength relative to the strongest nation. Thus a nation with the largest army, but a navy half the size of the largest navy in the game, is at the point (1, 0.5). Strength of armies is simply the sum of all regimental strengths. For navies, it is the sum of the weights of all ships; the weights are given in the `[hoi,vic]Ships` fields of the config object.

Each Vicky nation gains the historical officers of a HoI nation. The officers of the strongest HoI nation - that is, the one with the highest sum of army and navy strength - are handed out first, and go to the nation closest to it in army-navy space. Leaders are then handed out in descending HoI order of army plus navy strength, always going to the nation closest in army-navy space which has not yet received leaders. Vicky nations with less than 0.01 combined strength are always considered 1 unit further away than they really are, to ensure that mid-ranked historical nations are handed to mid-ranked Vicky nations rather than to minors with no army, which technically may be closer - that is, (0, 0) is closer to (0.1, 0) than (0.21, 0) is, but we want to prioritise the second nation, which actually has an army.