

# Communism in the Korean Peninsula.

**"The Working Men of All Countries, Unite!"**

## Model Description

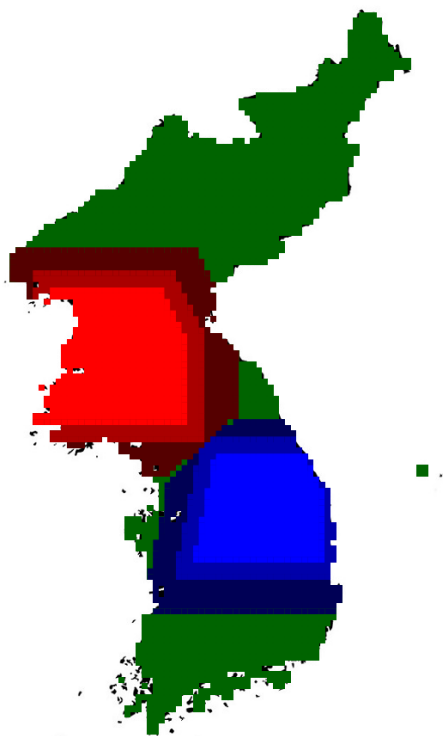
One of the most famous battle cries in history was originally placed at the final page of the Communist Manifesto. The spread of communism by Vladimir Lenin and Leon Trotsky is one of the most important events of the 20th century. The dream to create a world where all were equal was shared by many, but the ones who took action are few. Born from the mind of Karl Marx, communism spread like wildfire after the rise of the Soviet Union, and gained further influence after the Nazis' defeat at the end of World War 2.

In 1945, Korea was liberated from the Empire of Japan and split along the 38th parallel. The Communist party controlled the North was supported by the Soviet Union, and the Capitalist state in the South was supported by the United States. After 35 painful years of occupation by Japan, Korea suffered further hardship by being separated into two countries. As the 500-year old dynasty came to an end, Korea's citizens had to quickly adapt a new form of government.

This model will describe the ideological spread of communism and capitalism in Post-World War II Korea.

## Possible States of a Cell

A cell can be in one of three states: Neutral, Capitalist, and Communist, colored in green, blue, and red respectively.



The capitalist and communist regions will be further divided into three Stages, with Stage 3 meaning fully indoctrinated, Stage 2 being partially indoctrinated, and Stage 1 being somewhat indoctrinated.

The brighter the shade, the stronger the cell's ties to its form of government, as well as its influence on nearby cells.



3. If and only if the Stage 3 cell's government is favoured, it will not change state under any circumstances.
4. For Stage 1 and 2 cells, it does not matter if either government is favored. There are 3 possible influence states that this cell can be under.

Opposite State Influence > Ally State Influence

Opposite State Influence < Ally State Influence

Opposite State Influence = Ally State Influence

5. In the case of a greater opposite state influence, the Stage 2 cells will turn into a Stage 1 if the cell reaches a threshold of 7 blinks under the influence of an enemy state.
6. Similarly, a Stage 1 cell's Communist/Capitalist influence will collapse, and will revert to a neutral state after 12 blinks.
7. In the case of a greater allied state influence, the Stage 2 cell will turn into a Stage 3 cell after 7 blinks of influence. Similarly, a Stage 1 will turn into a Stage 2 cell after 12 blinks of influence. If there is an equal amount of influence, both states will slowly evolve towards their next Stage, albeit slower than it would have if it were strongly influenced by an allied state.
8. Neutral cells are very easily influenced. Only three ticks are required to turn into a communist/capitalist state. If there is an equal amount of influence from both communist and capitalist states, the neutral cell will remain neutral.

## Sample Evolution

First Generation:

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Second Generation:

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

### In the first generation

Cells 1, 2, 3, 4, and 7 are Stage 1 Capitalists.

Cells 5, 6, 10, and 13 are Stage 2 Capitalists.

Cell 9 is a Stage 3 Capitalist.

Cell 12 is a Stage 1 Communist

Cells 15, and 16 are Stage 2 Communists.

Cells 8, 11, and 14 are Neutral.

### In the next generation

Three cells are changed. 7, 8, 11.

Cell 7, which is influenced by a factor of 7 (Capitalism) has been exposed to capitalism for long enough to advance to the next Stage (2).

The factor of 7 comes from the following.

$$3 (\text{Cell 10}) + 2 (\text{Cell 6}), + 3 (\text{Cells 2,3,4}) - 1 (\text{Cell 12}) = 7.$$

Cell 8, which is influenced by a factor of 2 (Capitalism) has been exposed long enough to evolve into a capitalist state.

Similarly, Cell 11 has evolved into a capitalist state, as it is influenced by a factor of 1. (Capitalism).

## **Accurate Predictions Made by the Model**

The running program accurately shows that:

1. When people first convert to a new ideology, their level of commitment to it is low but becomes more and more fervent as time goes on, as their views are encouraged and strengthened by their like-minded peers in a self-reinforcing feedback loop.
2. Once an ideology has become firmly entrenched in a region, it is difficult for the opposing view to take hold anywhere within it. In other words, any rebellions get quickly stamped out.
3. Having access to the sea helps a minority ideology get a foothold because it only has to fight off the opposing ideology from one side and can't get surrounded.

## **What the Model Gets Wrong About Reality**

1. This model assumes that everyone is 100% open minded at the start, and are willing to switch back and forth between ideologies depending on what their neighbours think. In reality, most people are not this flexible in their thinking.
2. This model assumes that the Soviet Union and the United States have both completely pulled out of the peninsula, and have left the Koreans to squabble over their prized ideologies. Of course historically, this did not happen.
3. The Processing program allows the user to drop Communists/Capitalists anywhere on the peninsula at will, but in reality, people do not randomly change their mind spontaneously just because some random god-like person decided that the citizens shall now be communists instead of capitalists.
4. To allow the islands to be 'infected', technically the code pretends as if the sea has people in it. However, we know that not many people live in the sea.
5. The model ignores political ideologies besides Capitalism and Communism, such as socialism, fascism, constitutional monarchy, etc. Some Koreans may have wanted to return to a Monarchy, but this simulation ignores these people.