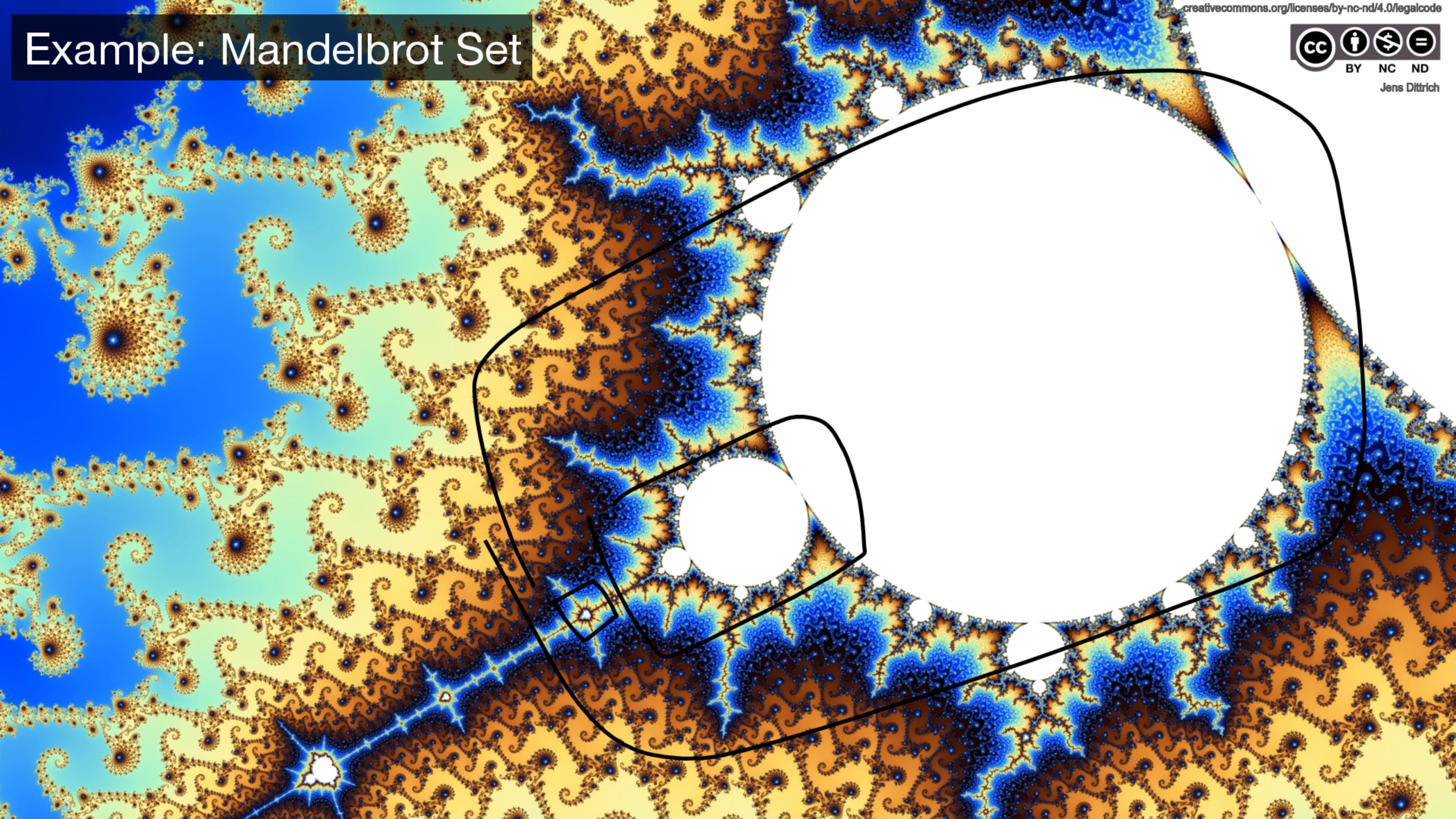


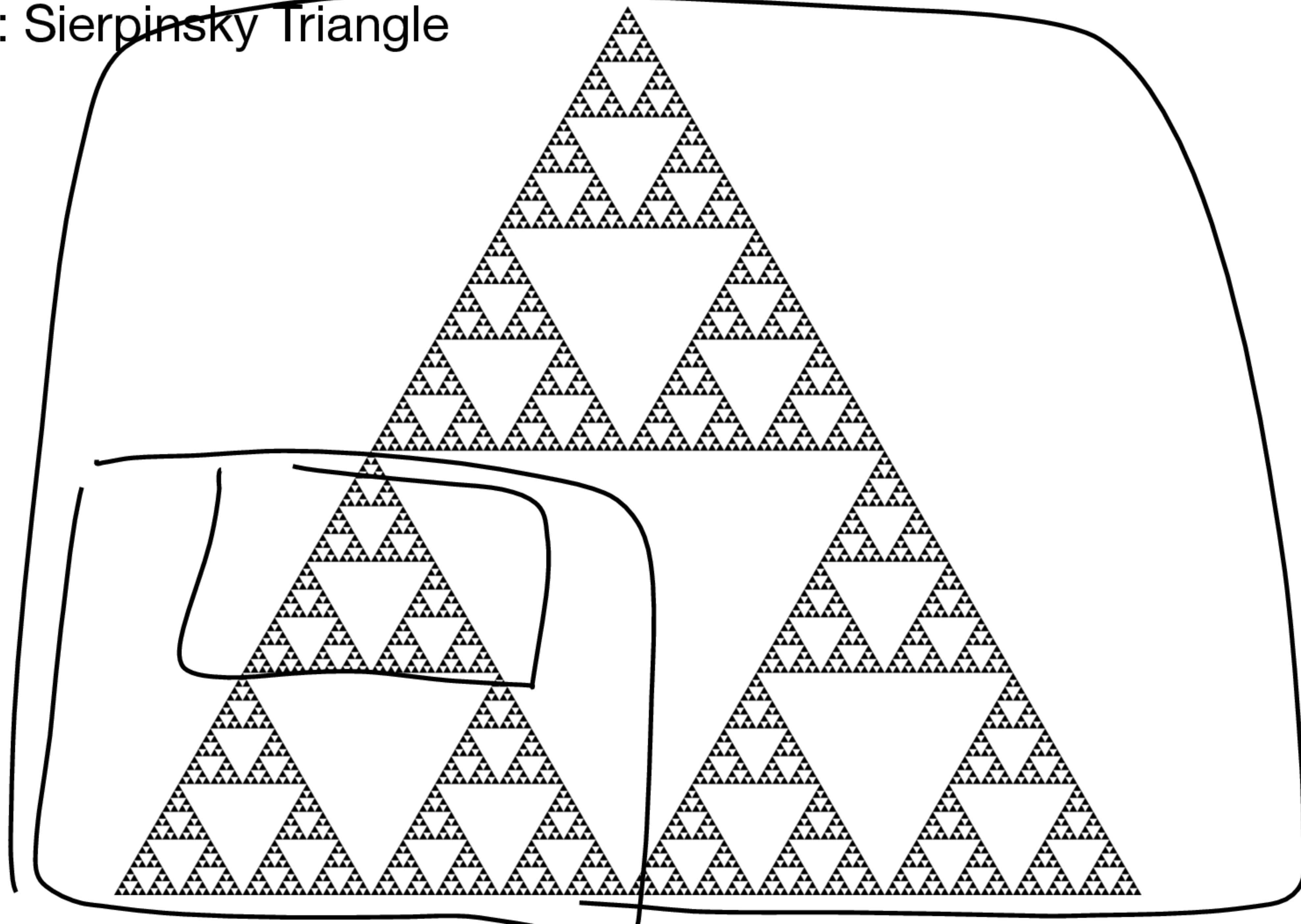


Jens Dittrich

# Example: Mandelbrot Set



# Example: Sierpinsky Triangle

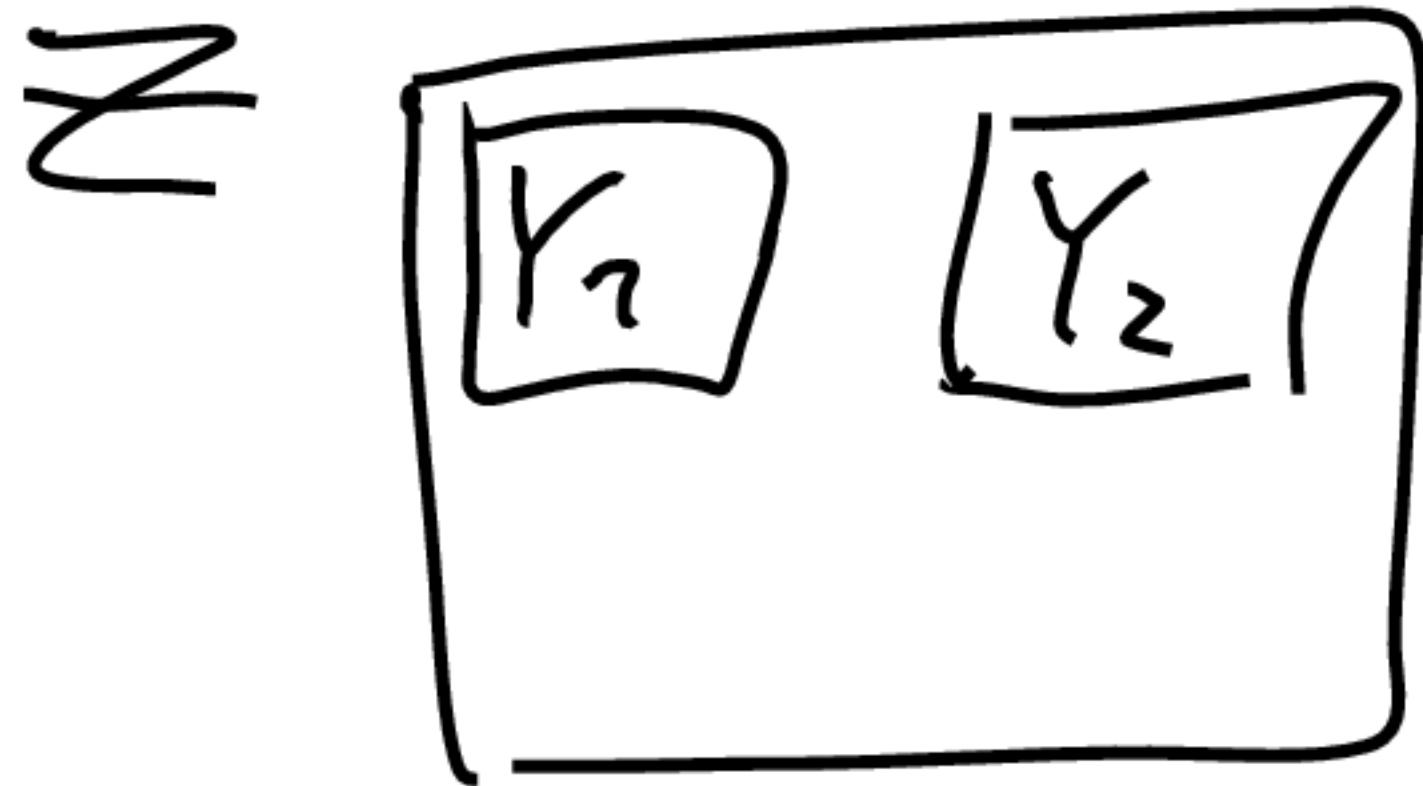


# The Fractal Design Pattern

given:

method X operating on granule Y

Y is component of larger granule Z



solution:

adapt X to solve problems for granule Z

# The Fractal Design Pattern

advantages:

- same code, same tests

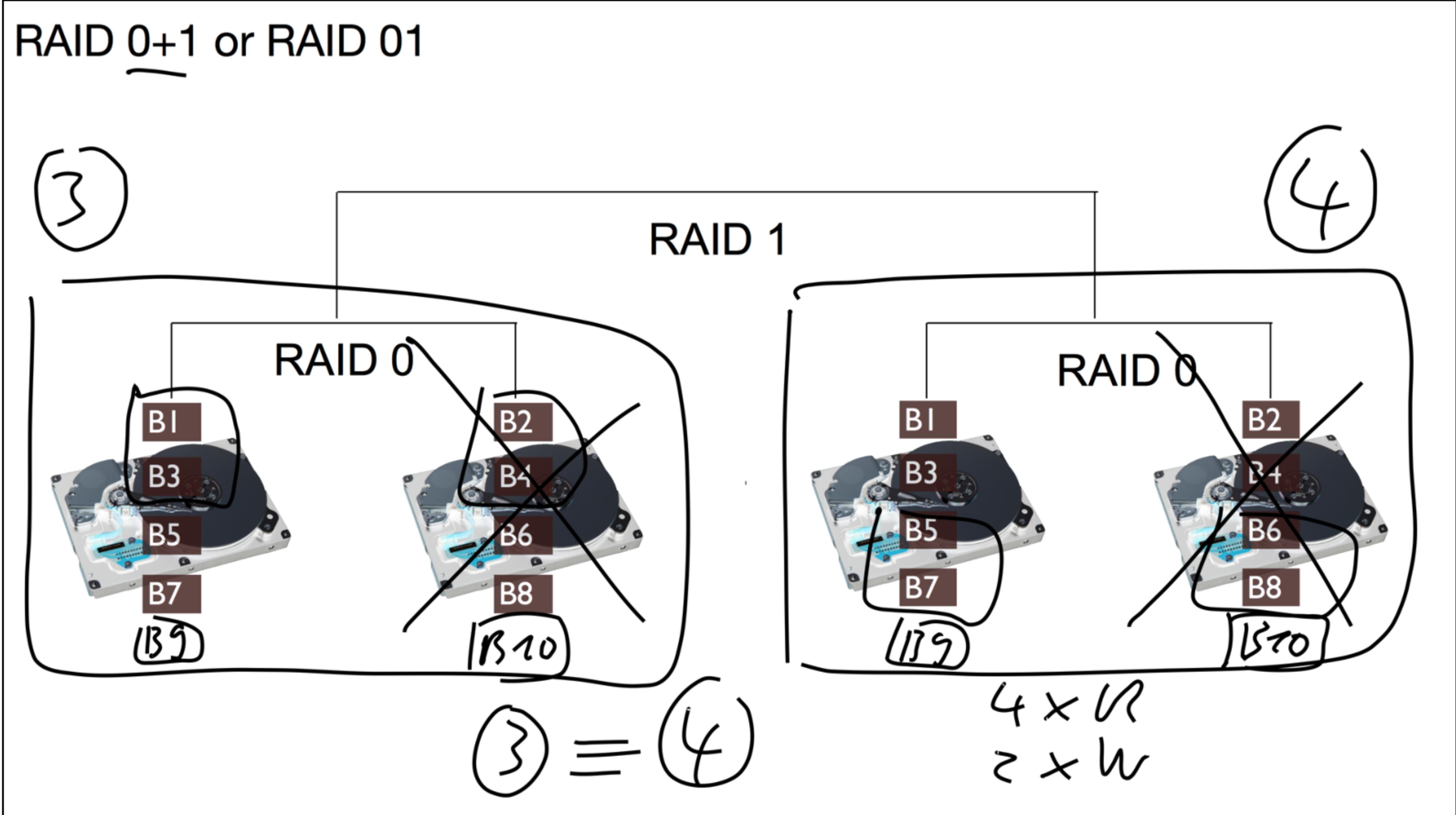
- no need to reinvent the wheel

drawbacks:

- solution not necessarily perfectly suited to work on multiple granules

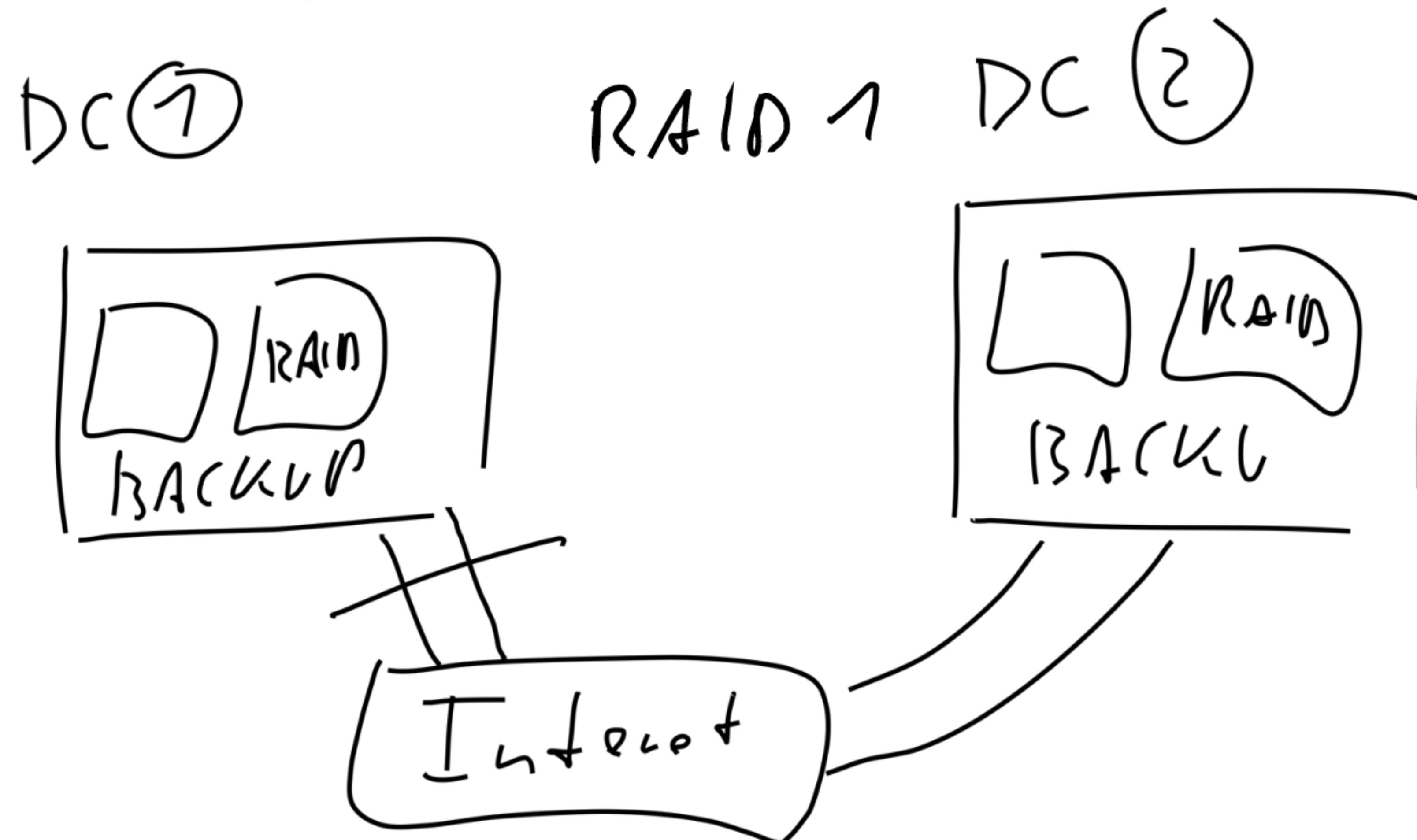
The All Levels are Equal Pattern is just a special case of this one!

# Example: Nested RAID



# Example: The Data Redundancy Pattern

## Data Center Example



# Credits and Copyrights

© iStock.com:  
mtphoto

CC:  
Wolfgang Beyer  
[http://en.wikipedia.org/wiki/File:Mandel\\_zoom\\_08\\_satellite\\_antenna.jpg](http://en.wikipedia.org/wiki/File:Mandel_zoom_08_satellite_antenna.jpg)  
<http://creativecommons.org/licenses/by-sa/3.0/>

and  
public domain