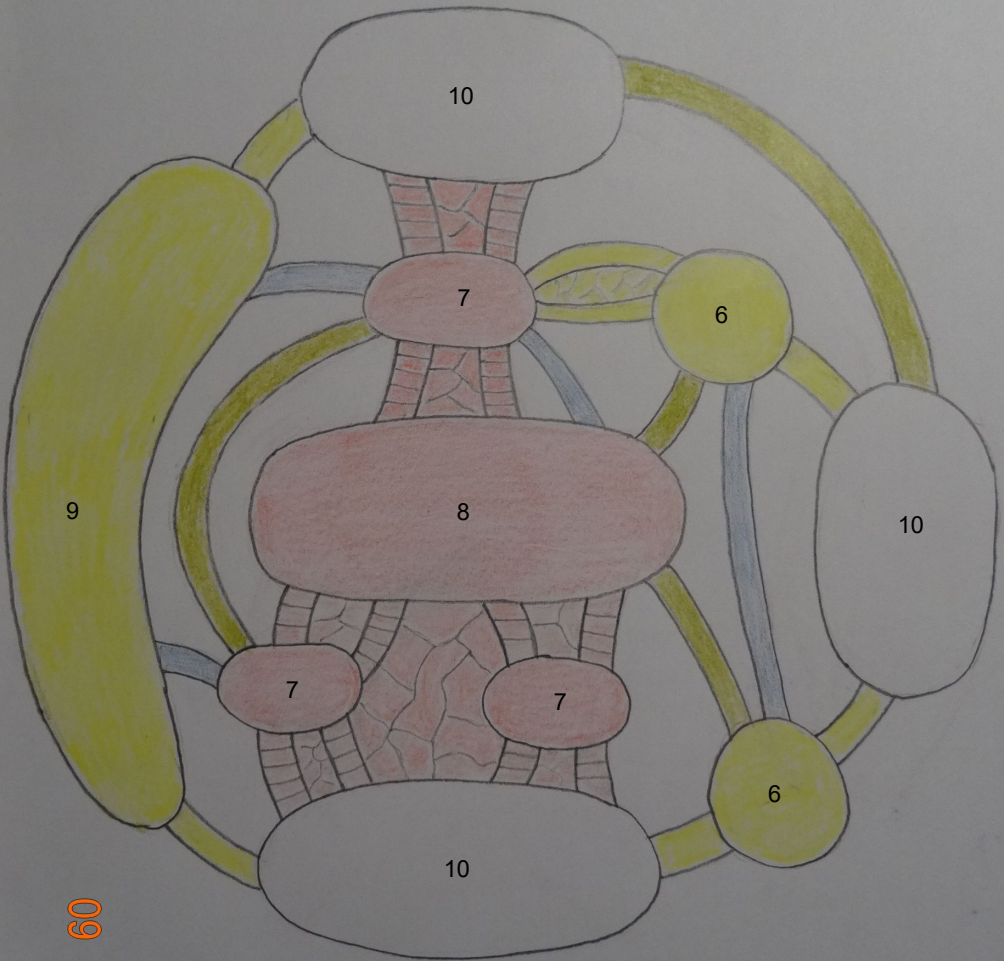


A map with a complete regular system of 12 contiguity submaps:

1 pink, 3 yellow, 4 blue, and 4 green.

The structure of the pink contiguity submap is drawn in details, the other contiguity submaps are drawn sketchy.

Numbers inside of some cells are their ranks.

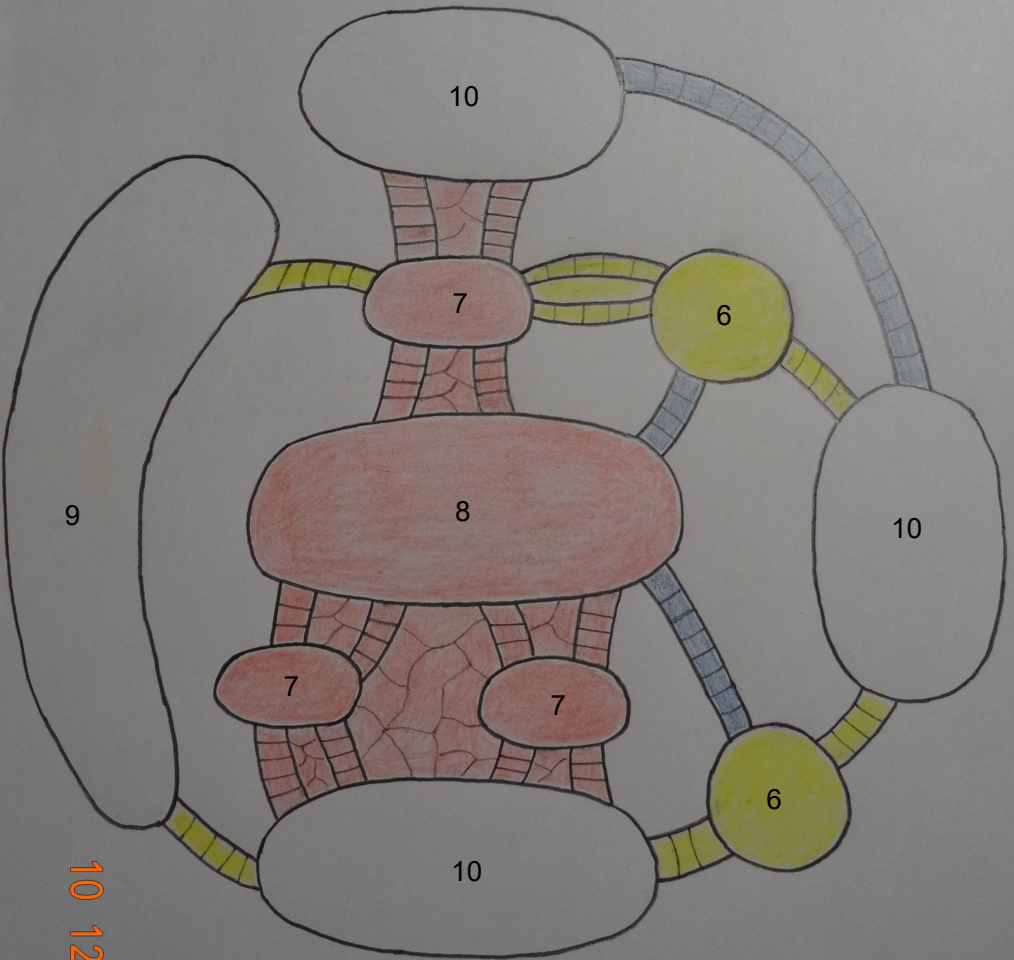


This map contains 3 ordinary cells (white ovals), 7 special cells (4 pink and 3 yellow), and a lot of concealed cells (like scales on a pangolin). 10 non-oval white regions are assumed to be filled with 0-cells, whose all sides are 0-edges.

This system of contiguity maps is not distinguished.

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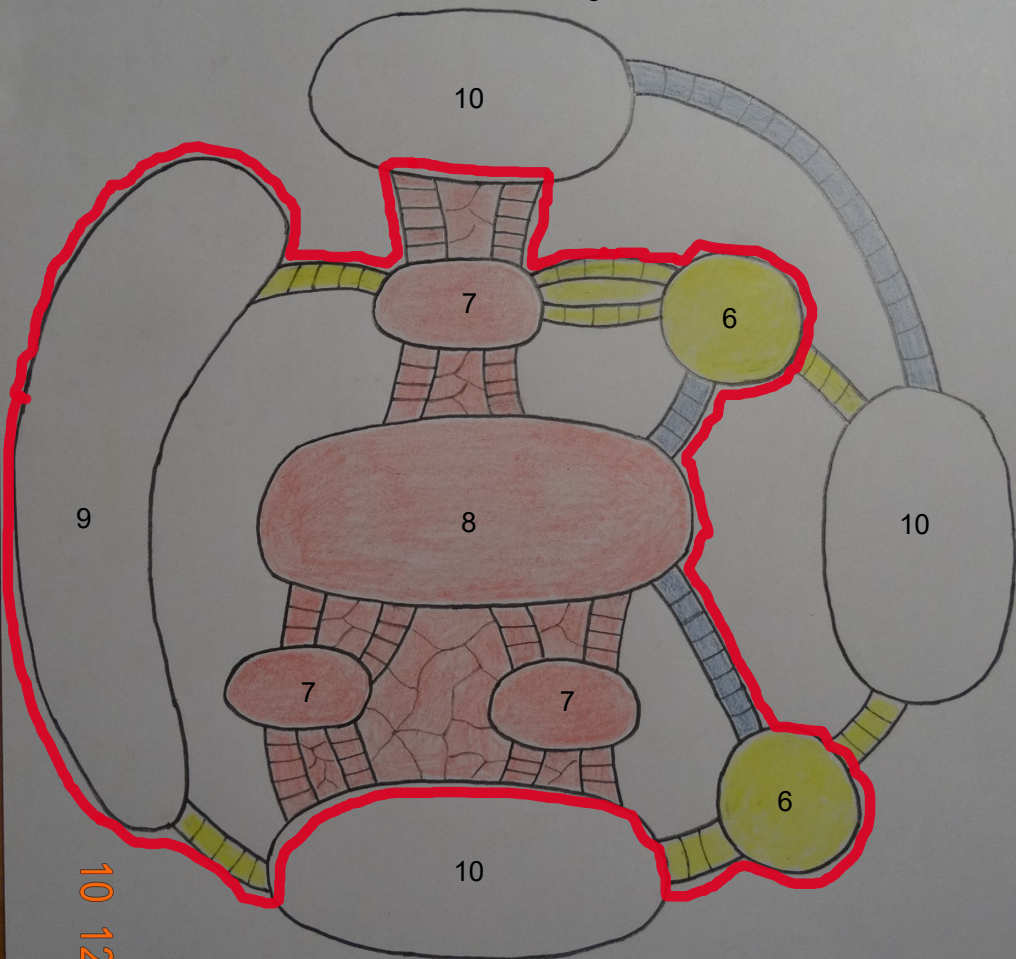
A new map with a complete regular system M of 8 contiguity submaps.
This system is again not distinguished.



10 12 2020

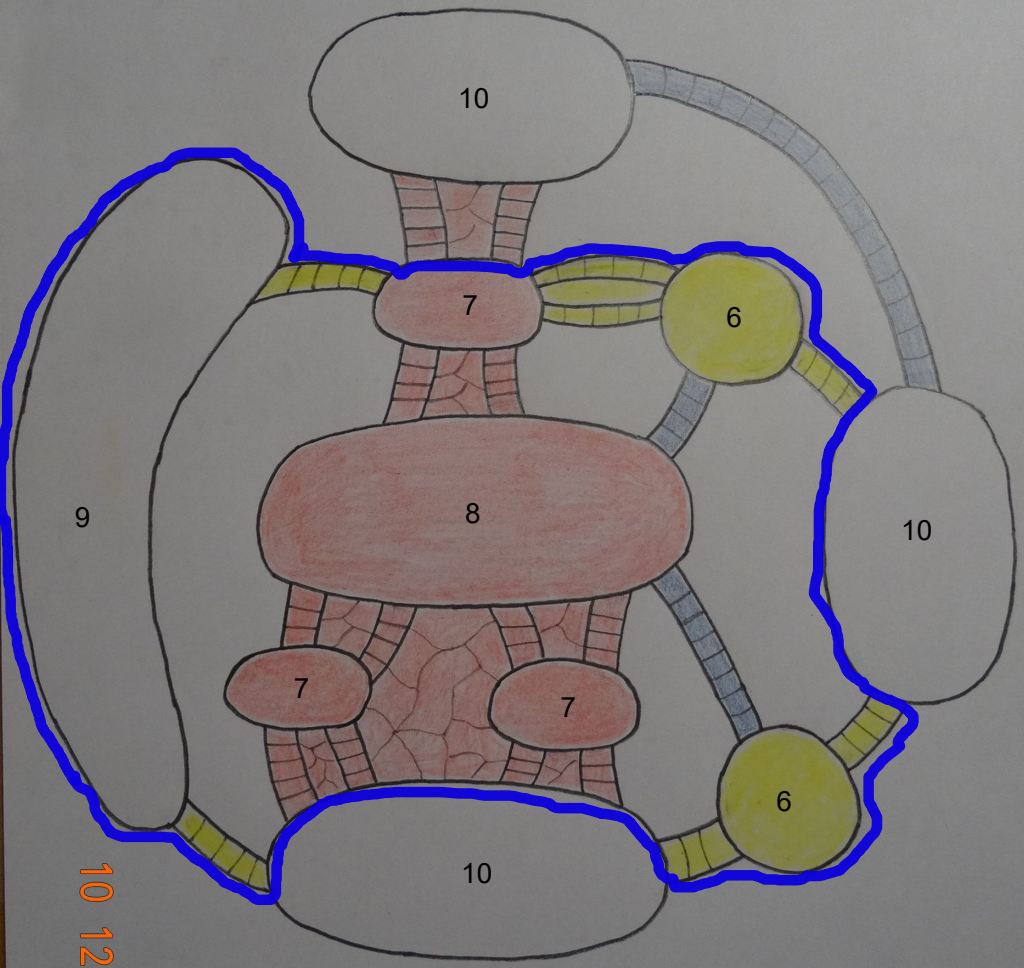
A new map with a complete regular system of 8 contiguity submaps.
This system is not distinguished.

Indeed, we can choose another complete regular system M' consisting of 4 contiguity submaps (one of them [bounded by the red line] is new, and 3 are parts of the old submaps). Clearly $\tau(M') > \tau(M)$.
But we cannot claim that M' is distinguished.



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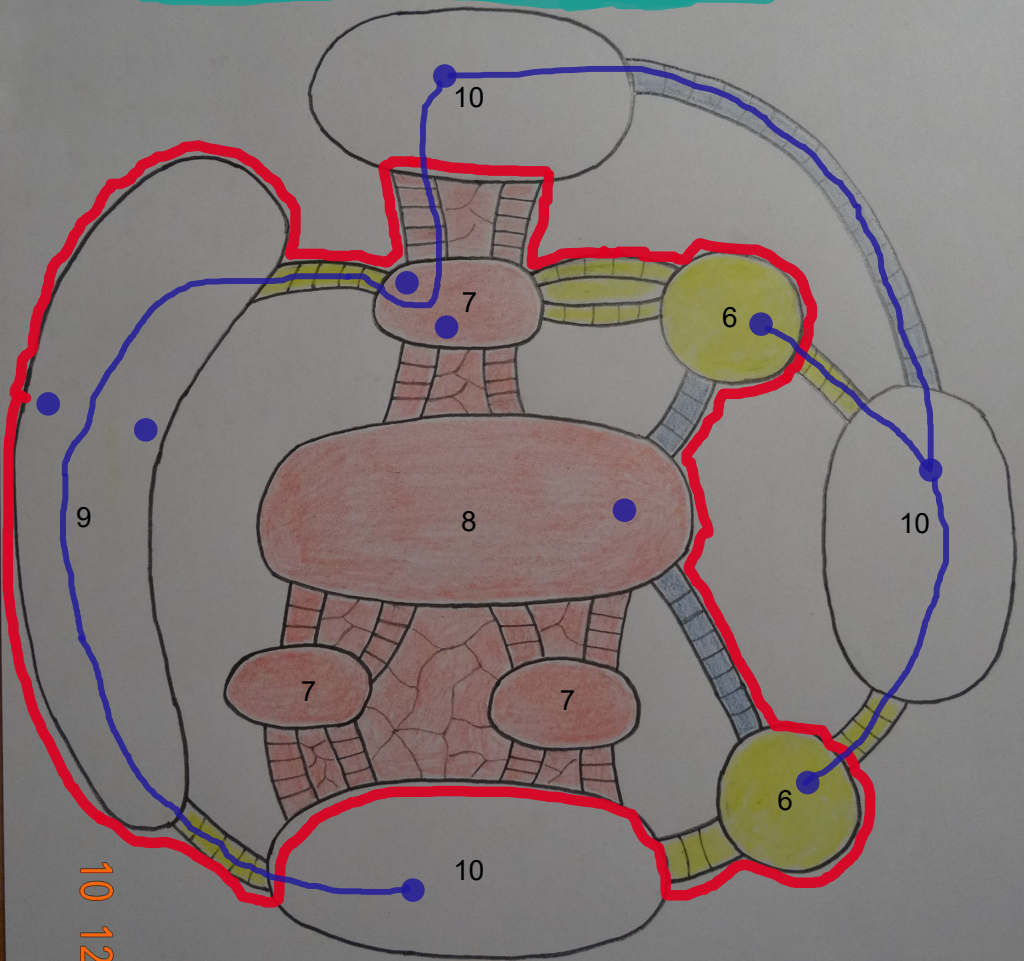
We can choose another complete regular system M'' of contiguity submaps. It consists of 3 submaps (one of them new [it is bounded by the blue line] and 2 are parts of the old submaps). However, we cannot claim that $\tau(M'') > \tau(M')$ or that $\tau(M') > \tau(M'')$. To decide, we should know the ranks of all R-cells in the contiguity submap between 10 and 7, and we should know the number of 0-cells in the region between 6, 10, 6, 8.



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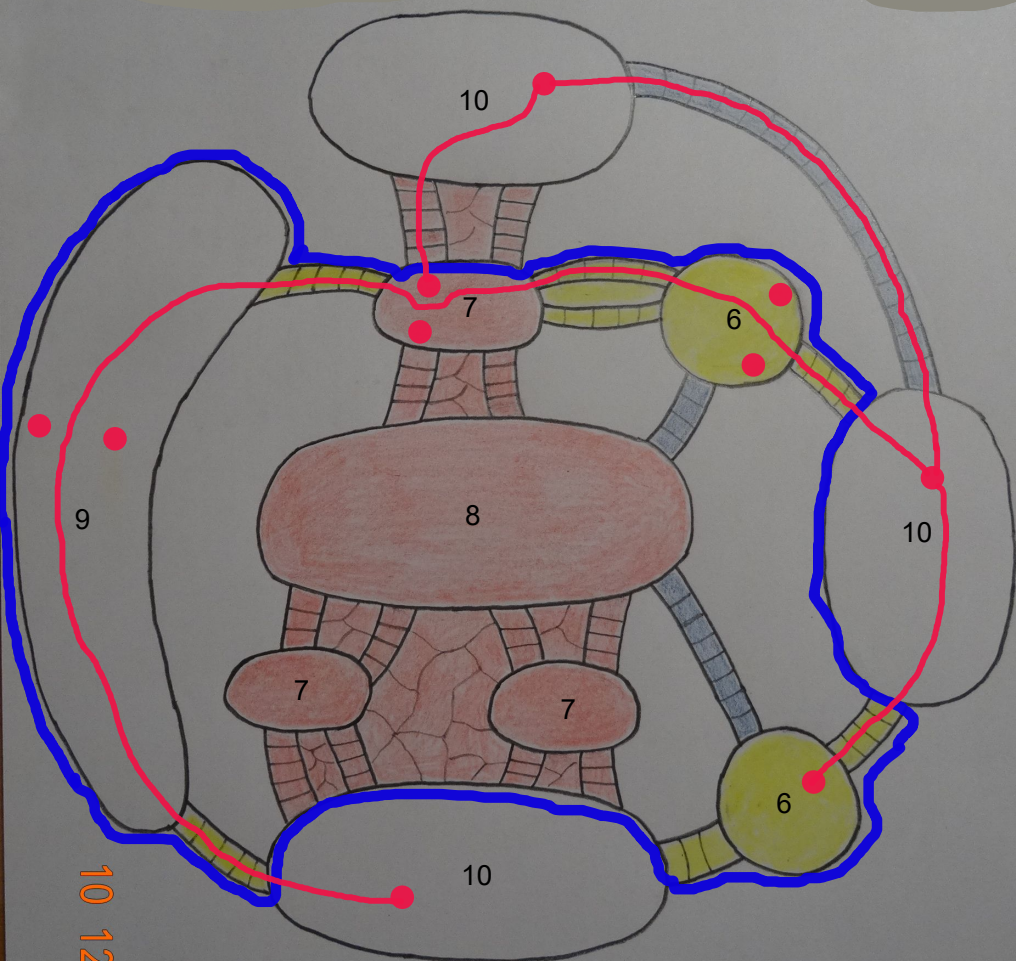
Is it true that at least one of M' , M'' is distinguished?

The graph Φ associated with the system M' of contiguity submaps.



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The graph Φ'' associated with the system M'' of contiguity submaps.



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