

Hide Unlinked Nodes

## Complex International Relations

January 2007

People form social networks. Business networks are composed of organizations. Nations also create connections -- political and economic ties -- to meet mutual goals. Above we see a self-organizing network map of international players who have interests in the Mideast. Nations are shown by rectangular nodes, non-state actors are shown as ovals. Nodes connected with grey links show positive political/economic relationships (friends). Negative political/economic relationships (foes) have no links connecting them, but do have a repelling force that pushes the nodes apart.

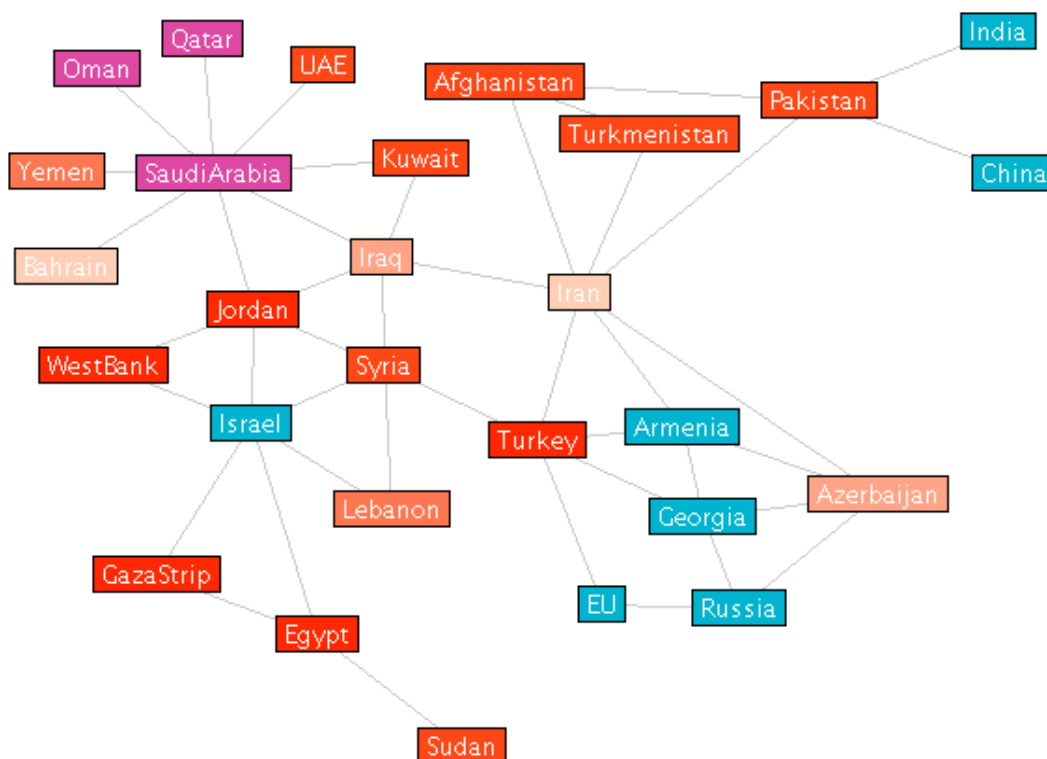
You can interact with the network map by dragging the nodes around the screen when they are in motion or when stopped. Use right mouse-click on nodes to show and hide a part of the network. When the network is moving, try putting the nodes of two known enemies side by side -- soon you will see them move apart. Next, try pulling apart

two allies -- they will quickly end up side by side again. The local interactions of every pair of nodes creates the global activity you see. The network does not self-organize when it is in the Stopped mode.

I recently updated the map above to reflect the increasing tension between the Sunni and the Shia spilling out of Iraq and infecting the whole Mideast. Notice how the map now self-organizes[give it a minute] into what will be the likely "sides" if a greater mideast war breaks out. Look at who is caught in middle... what will China, India and Russia do?

Below we see another network map of the Mideast. This map reflects the geographic connections in the region -- two countries are connected if they share a border. The red nodes are shaded by the concentration of Sunni or Shia Muslims in the country. The darker the color the higher the proportion of Sunnis. The lighter the color the higher the concentration of Shia Muslims. The purple nodes show a country dominated by a different sect of Islam [Wahhabi, Ibadhi]. The blue nodes show countries where Muslims are less than 15% of the population.

There are *no* repelling forces in the model below. You should be able to arrange the nodes so that no two lines intersect. When comparing the two maps, can we see Israel's predicament?



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