The Internet Mapping Project

Lic. Mara Vanina Osés

Based on a project by Kevin Kelly

Presentation:

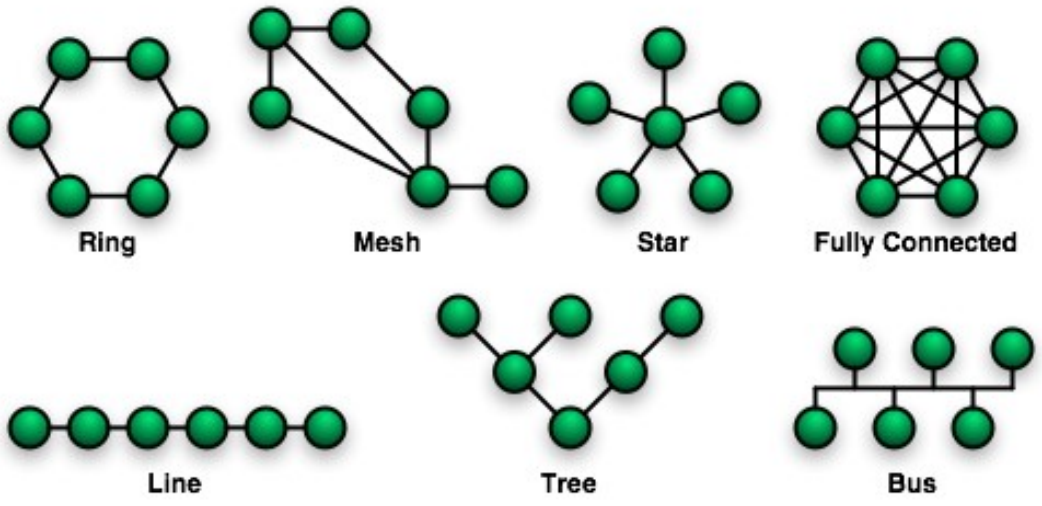
Based on the project that Kevin Kelly posted on is blog (http://kk.org/kk/) we made an analysis of the data that he was able to gather, 52 drawings of the internet as people sees it and submitted on June 1st 2009 through flickr. The art works were made by people between 12 to 72 years old.

Some concepts (or establishing a common ground)

This is a list of the categories and values that were taken in consideration for the analysis of the drawings posted by Kelly.

Network topologies

According to Wikipedia the **Network topology** "is the study of the *arrangement* or *mapping* of the elements (links, nodes, etc.) of a network, especially the physical (real) and logical (virtual) interconnections between nodes." And we can find seven kinds of networks: (the image and text that follows are from Wikipedia)



- Ring: The ring network connects each node to exactly two other nodes, forming a circular pathway for activity or signals - a ring. The interaction or data travels from node to node, with each node handling every packet.
- Mesh is a way to route data, voice and instructions between nodes. It allows for continuous connections and reconfiguration around broken or blocked paths by “hopping” from node to node until the destination is reached.
- Star: The star network consists of one central element, switch, hub or computer, which acts as a conduit to coordinate activity or transmit messages.
- Fully connected: Every node is connected to every other node.
- Line - Everything connected in a single line.
- Tree: This consists of tree-configured nodes connected to switches/concentrators, each connected to a linear bus backbone. Each hub rebroadcasts all transmissions received from any peripheral node to all peripheral nodes on the network, sometimes including the originating node. All peripheral nodes may thus communicate with all others by transmitting to, and receiving from, the central node only.
- Bus: In this network architecture a set of clients are connected via a shared communications line, called a bus.

Type/Morphology:

These categories are base on a first scan of the graphics. We take in consideration the way the graphic appears as a picture and not the configuration of the network represented.

- Cloud/No Specific Center: graphics on this category does not have a center that can be identify and appear more like a cloud of items that a group of them in a connection.
- Radial/With 1 center: One of the items in the graphic is connected to all the other items.
- Multiple Centers: more than one item has a large amount of connections with other items.
- Graphical/Pictorial: representation as a scene or map.
- Elliptical: the representation is an ellipsis.
- Others: other forms of representations that are not contemplated on the other categories.

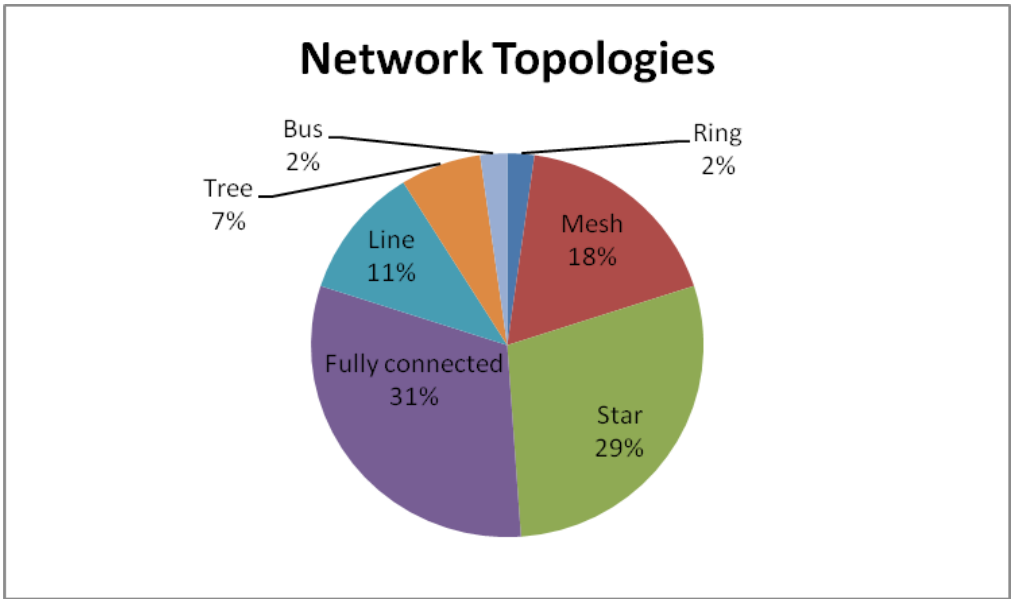
Home

The position where the drawer put the “home” or “me” tag or a representation that can be identify as so (i.e. a person or a house)

- Center
- Top
- Bottom
- Rigth
- Left
- Not specified

Analysis of the quantitative data

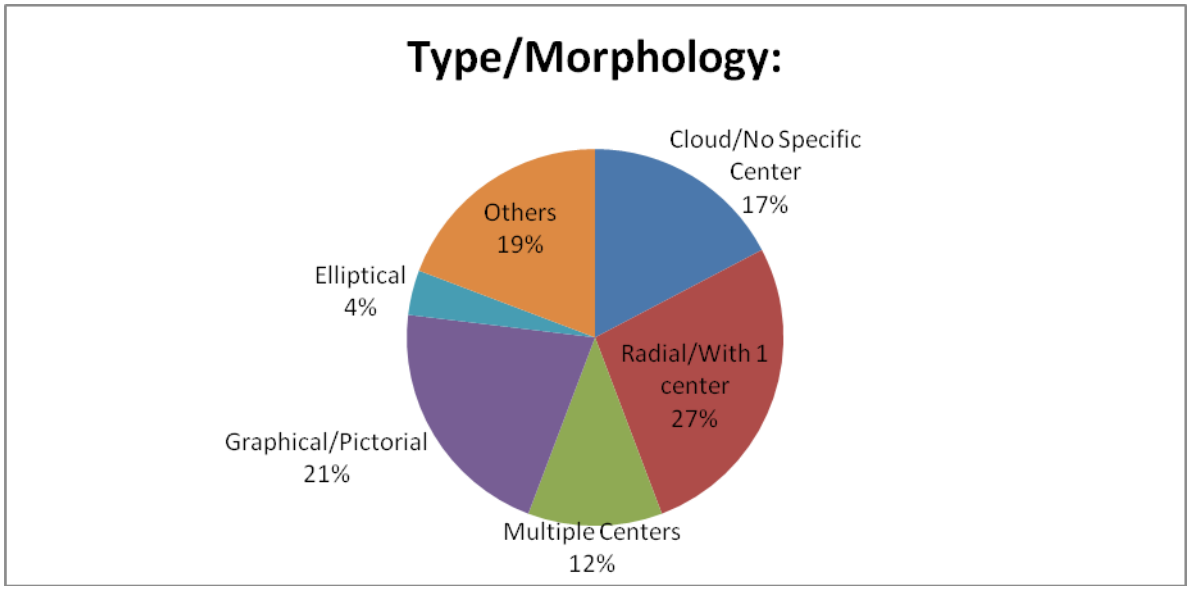
One of the most heard descriptions of the Internet is that it is a systems or networks interconnected; we call it the network of networks, and say that everything is connected to everything and that our computer (we) are just a part of that network. But is that how people ACTUALLY see Internet? Or is it just a common phrase? Or a college definition?



Graphic 1

From the 52 persons that made a personal graphic of Internet the 31% have the idea that Internet is a Fully Connected system, 29% made a graphic that represent a Star network (see graphic 1). This shows that even when a lot of people have the idea that Internet is the network of networks a lot more don’t have yet this idea; they see the Internet as a connection with a center (star) as a way to get to the rest of the items (mesh) or as a simple line of items.

Seen the web as a fully connected system implies that we can see ourselves as equals to everybody and everything (remember that in web 2.0 we can connect people, links, images, videos, etc. going from one to the other with no restrictions, they are all the same). Even when you have to be unique and show who you are you have to know that you are equal to everybody in this aspect. You have to individualize yourself but knowing yourself as identical. We can see a representation of this in the image 034 (included below) of the KK's Flickr Album. The ME is at the same time equal in the amount of links but different in the form of representation.



Graphic 2

The concept of a fully connected network can be related with two of the morphology categories: cloud and multiple centers (see description of the categories above). And we can see this in the numbers: 31% of fully connected (see Graphic 1) and 29% of cloud and multiple centers (combine) (see Graphic 2). Eleven of the fourteen (78%) people that see the Internet as a fully connected system draw pictures that can be describe as cloud or with multiple centers.

Same examples of drawings that are both fully connected and cloud or multiple centers:

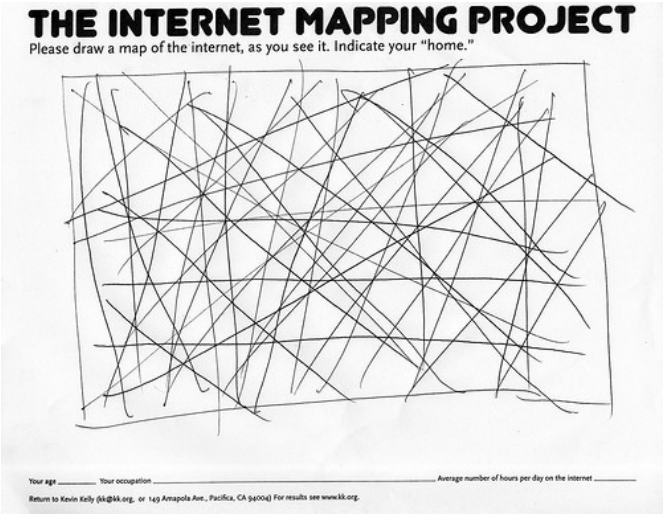


Image number 009 from Kevin Kelly [Flickr Album]

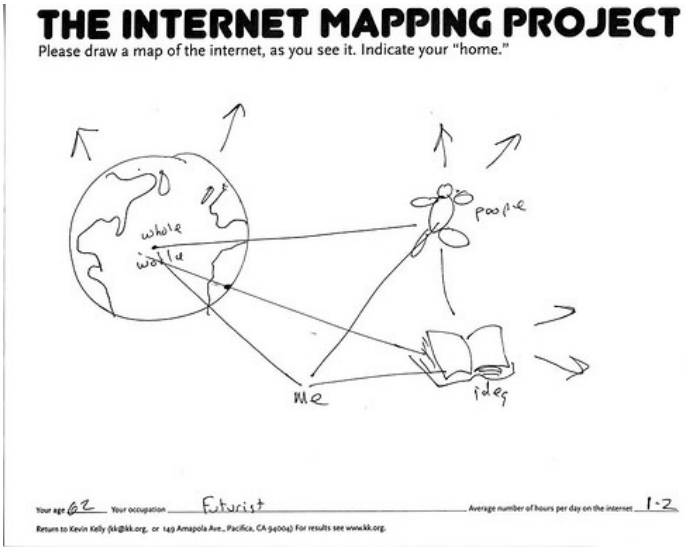


Image number 034 from Kevin Kelly [Flickr Album]

We can see the same correlation between the star network and a radial morphology of the picture (29% and 27% respectively). And when we cross the data we can see that 85% of the people that represented the web as a star system chose a radial type of drawing.

Two examples of these drawings from the Album:

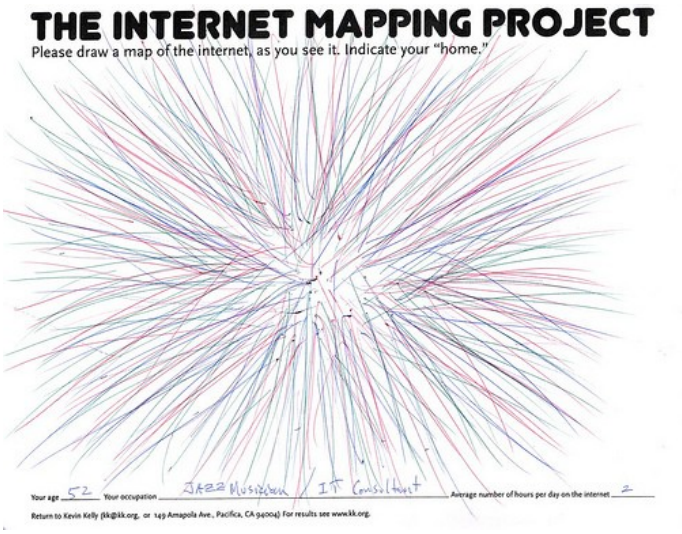


Image number 047 from Kevin Kelly [Flickr Album]

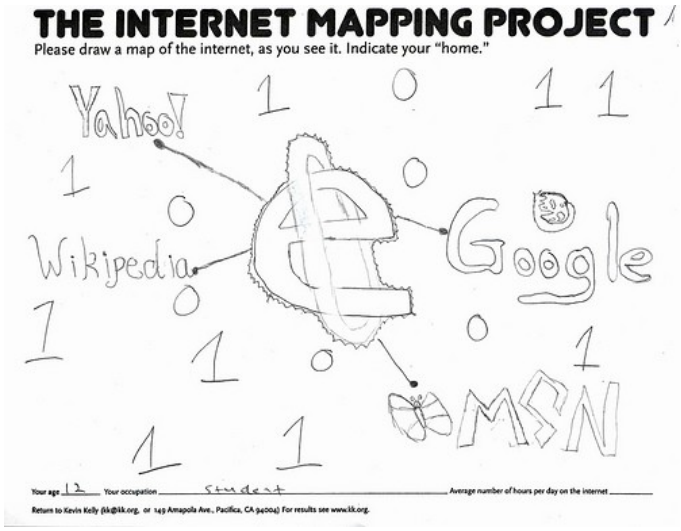
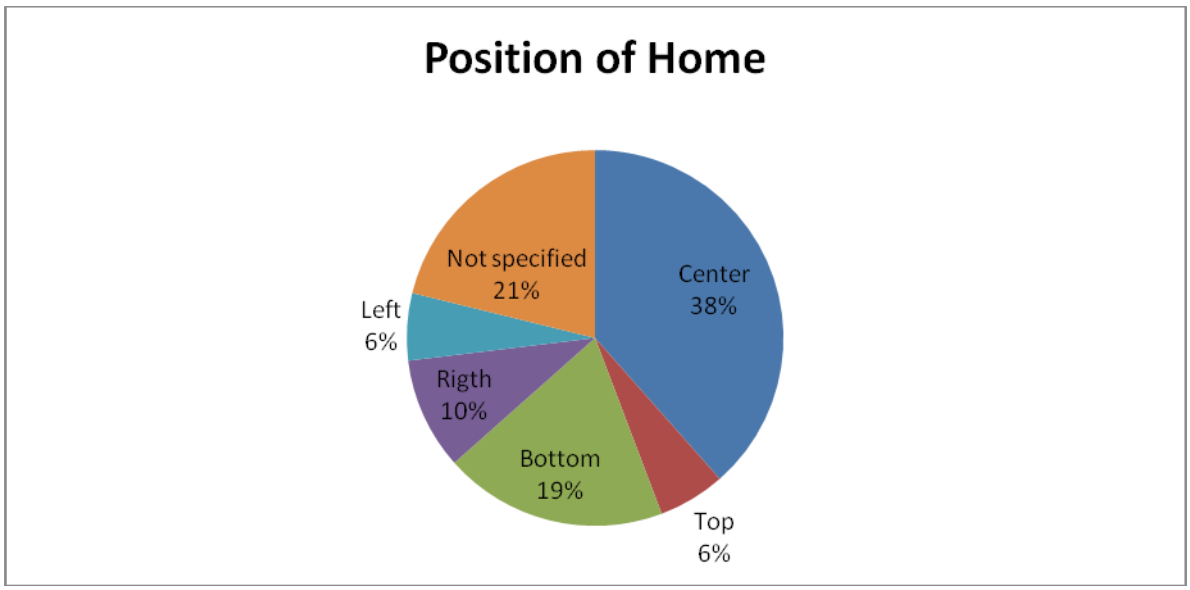


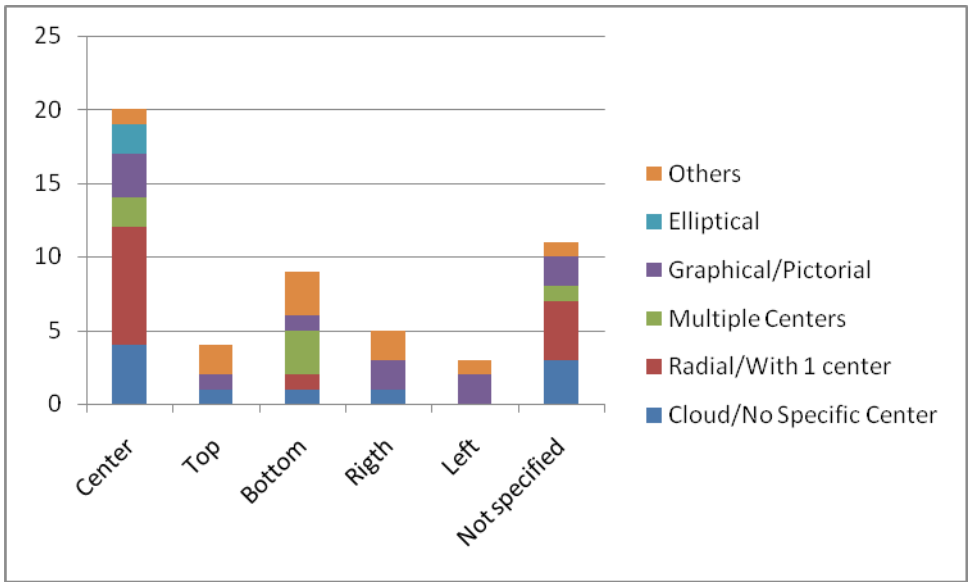
Image number 036 from Kevin Kelly [Flickr Album]

Another interesting information that we can consider is the position of the HOME (self, house, “me” word, dot or arrow) in the page or diagram. Where do people see themselves in all this?

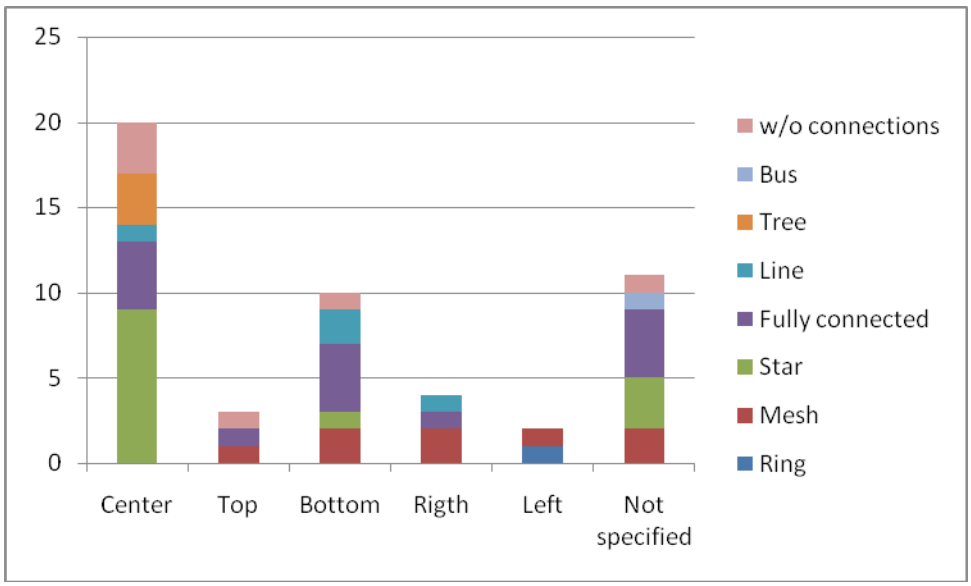


Graphic 4

For some (38%) they are the center in this whole story, they represent themselves in the center of the page, and see the net as a star network (see Graphic 6) and as a radial type (see Graphic 5).



Graphic 5



Graphic 6

But what is interesting is that 1 every 5 persons can't place him/herself on the web. But as it can be seen on graphic 6, 36% of them have the idea of a fully connected network (image 31) and the rest of them simply can't see themselves in the picture (image 30).

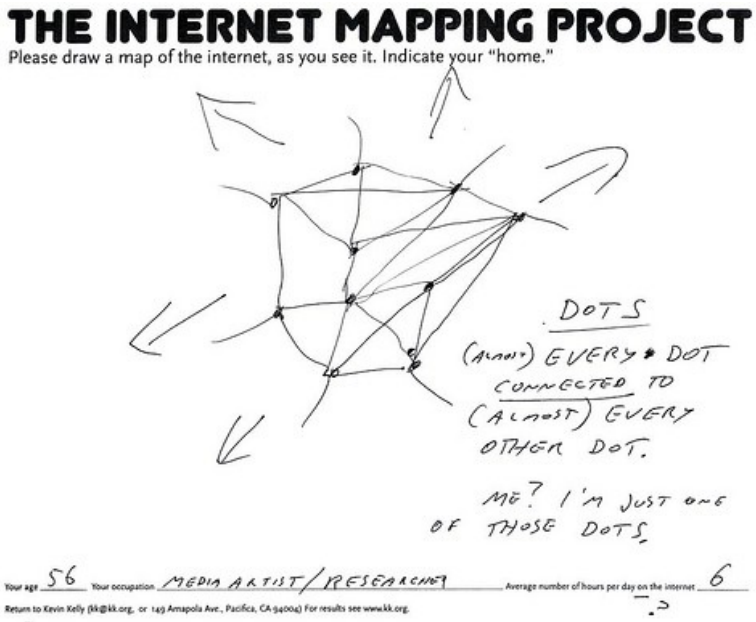


Image number 031 from Kevin Kelly [Flickr Album]

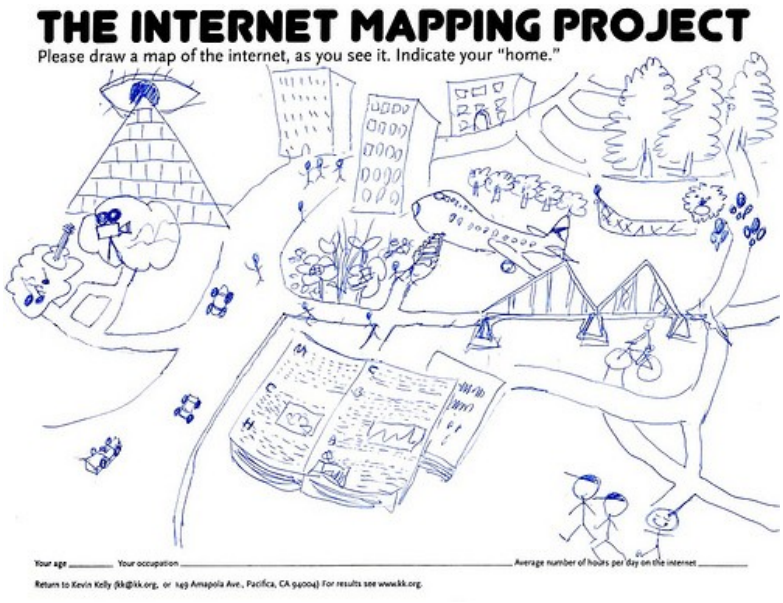


Image number 030 from Kevin Kelly Flickr Album

So far we have that 2 out of 5 people consider themselves as the center of Internet and 1 out of 5 can't place him/herself there (either because he/she could be anywhere or because doesn't found a place). But what happens with the other 2? Well, 1 is divided between been ahead (left), behind (right) or above (top) Internet. And the other one feels like this:

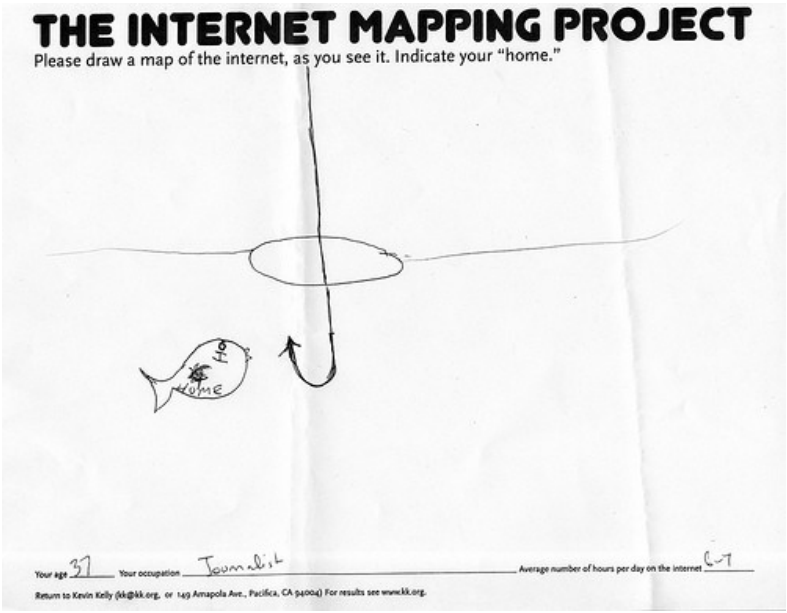


Image number 007 from Kevin Kelly Flickr Album

Being fished without bait.

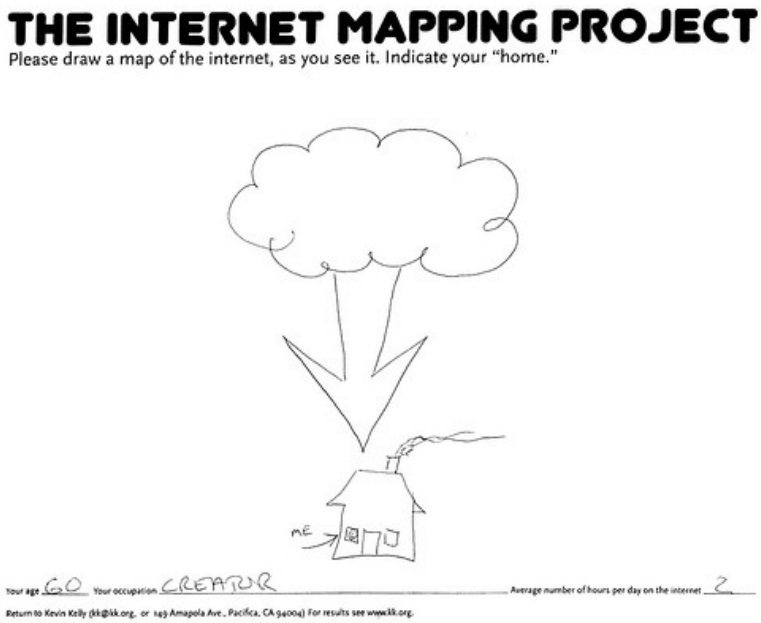


Image number 017 from Kevin Kelly Flickr Album

Or under the threat of being crushed.

Final thoughts

This is a preliminary and short review of the data but it allows us to see a lot. Not everybody has the idea of Internet as an interconnected network, and even when they see themselves as the center they don't see the relationship between the other items of the net. This make us think if we are truly prepared for the, already here and almost saying goodbye, web 2.0, the web of interactions. People use it but apparently they don't think it/ feel it.

Is left for further analysis what is more important for people when thinking the Internet? Relationships/connections or people or data or apps or webs? Or is something else?

References

Kelly, K. (n.d.). *Internet Mapping Project - a set on Flickr*. Retrieved June 2, 2009, from http://www.flickr.com/photos/kevinkelly/sets/72157613562011932/

Kelly, K. (2009, June 1). *The Internet Mapping Project*. Retrieved June 2, 2009, from http://kk.org/ct2/2009/06/the-internet-mapping-project.php

Network diagram - Wikipedia, the free encyclopedia. (n.d.). Retrieved June 2, 2009, from http://en.wikipedia.org/wiki/Network_diagram

Red de computadoras - Wikipedia, la enciclopedia libre. (n.d.). Retrieved June 2, 2009, from http://es.wikipedia.org/wiki/Red_de_computadoras

Network topology - Wikipedia, the free encyclopedia. (n.d.). Retrieved June 2, 2009, from http://en.wikipedia.org/wiki/Network_topology