[1]Are the categories -commonly sense speaking- well-built ? Cannot we add something like an overlaping category layer neither about the clicking number nor the semantic distance but the idea association ?

Let's set our point of reference as two distinct unrelated articles. First, within only this set of article, we can try to measure the human being distance from the minimal distance (here given by the Floyd-Warshall algorithm).

Then we could check the distance between two articles in the same category, subcategory, and check the extremum in this distance set. Why would two articles categorized the same way (so close semanticaly) and not be close by «cliking» ?

Moreover, we could compare the distance between unrelated concepts with the distance between a couple of *opposite concepts,* not completly unlinked articles, but far from each other on a semantic way. The following pairs are good examples: love/hate, nature/culture, light/dark, 09/11 and peace for the world,…

To perform those comparisons, we must need an efficient metric, and because of the human character of that idea-association distance, the number of clicks alone and the Floyd-Warshall matrix might not be the best references. Instead, by combining time, numbers of clicks, and difficulty [difficulty*time/numbers of clicks] (why not failed paths as well) we could obtain a very basic common sense metric to see how far are opposite and categorized articles from the unrelated once. If there is a huge gap between those, why not, modify or add a new type of connexion called idea-association.

Idea 1: It is an interesting perspective to come up with a categorization system of articles based on their association as perceived by humans. However, many things are unclear here. (1) You talk about unrelated concepts, but the examples provided are about "opposite" concepts. Note that unrelated and opposite don't mean the same thing. As an analogy, being uncorrelated is not the same as being anti-correlated. In fact, IMHO, opposite articles maybe more related/associated to each other than unrelated articles. (2) Combining different aspects (time, numbers of clicks, and difficulty) seems reasonable, however, it's unclear why the proposed combination [difficulty*time/numbers of clicks] makes sense? (3) Lastly, let's say you are able to come up with a categorization based on "idea association", how would you evaluate its correctness or validity?

[2]How easily can we switch from a category to another, through a subcategory to another one ? How strong are the links between categories ? Are the paths easy to find ?

We could remake the network article map -which seems feasible, but not clear, at an article level- at a category level. We could scale the connexions by counting the number of direct links from a category to another (so a direct machine count). Then we could scale them from the human point of vue, counting only the sucessfull paths people took instead of the direct ones. So we could visualize how people are connecting categories between them and if they seem linked.

Idea 2: While it is an interesting idea to come up with a map/network of article categories, it is unclear what you would do with it once you have such a map. Please clearly state your end-goal here, i.e., the motivation for building such a map, and what real-world problem would such a representation help in solving.

[3]What about the without-a-solution games ?

In the matrix the Floyd-Warshall algorithm gave, we see that some articles cannot be reach from one to another. Is there some isolated subsets of articles (let's call them islands), like lone bubbles in the dataset ? How big are they ? Are failed paths due to those islands ? Or is it just an instinctive reaction with two articles which seem absolutely not related ? Are islands related to categories ? Do categories contain intrinsic islands ? How is it possible regarding to common sense ? Are we touching the limit of the dataset ? That way we could analyse the reason of the failures and visualized the data in another way.

Idea 3: Interesting, but again too many questions posed without a clear description of how some of them may be addressed. I have some follow-up questions: (1) What do you mean by: "How is it possible regarding to common sense" and "Are we touching the limit of the dataset" questions?, (2) What kind of analysis would you like to do with the reason for the failures? IMHO, there are just two reasons: "timeout" and "restart". I am a bit puzzled as to what exactly you would like to do here.