First of all, I consider the field of problem solving perspectives (and archetypes) very interesting and really like the whole idea. I consider your previous pilot study interesting and innovative. It had simple and straightforward experimental plan. What is more, it had some very important features that in my opinion are missing in your current master thesis project. Below, I will describe my thoughts about your previous pilot study and sequentially move to your current project and compare them. Before leaving any comment, firstly I want to let you know that my comments could be irrelevant or even misleading because I did not saw the whole theoretical background of your previous and current project and I also lack the knowledge about the features of a different programming language (this is very important, since I cannot identify what are the psychological differences and aspects in one´s reasoning when using different coding languages).

When I look on the pilot study from the methodological perspective, it had a clear experimental design where independent (perspective) and also dependent variables (optimal problem solving, length of code and time required to solve the problem) are well defined. I do not know whether you used any quantitative statistical methods when comparing two experimental conditions, but it is clear that you could do that. Moreover you also used a think aloud method which allows experimenter to analyze data in a „qualitative way“. In this part I also miss some information about how you analyzed data and what approach did you choose. When considering the aims of this study, both of these aspects of data analysis (quantitative and qualitative) seems to work along pretty well and complement each other. Since there are information missing about what data analyses you chosen in your pilot study, **I would like to know how is your knowledge in both qualitative and quantitative data analysis.**

When I look on your present project for the master thesis, there are some important research aspects missing. What is more, some of your goals are little unclear for now (or maybe just for me, because as I said, I do not have all the information and theory behind your project) and also little ambitious. In my opinion, whether you accomplish some of these goals is in a certain extend dependent on your findings. From my own previous experience from dissertation thesis, I know that this could be very dangerous and it could cause serious problems when defending your thesis. Below I describe and reflect all the parts of your project that are unclear to me:

**Firstly, I plan to expand this model by examining even more problems with at least two perspectives identiﬁed, and in this way catalog common archetypes.**

This goal is little unclear to me, I think it needs to be more specific. How will you examine more problems? Do you want to create a list of problems with two or more perspectives and let them to be solved by participants? As I understood correctly from your pilot study, the way to identify and catalog common archetypes could be done by analyzing verbal protocols. If you plan to do this, I think that it is too ambitious plan and (because there are a lot of different problems) it would require a lot of data collecting in many years (in my opinion it is almost impossible to accomplish such goals in a master thesis).

**After the list of archetypes is complete, I plan to dive into each of them and research their properties, features and their function in problem perspectives.**

What are the aspects and features of this examination? How will you examine these archetypes and how will you operationalize their functioning in problem perspectives? If we want to set such a goal, I need to know the methodology that will be used here. What properties we will examine and what materials will be used here? In fact, what are the properties of archetype? How many properties exist? These questions are such wide and still consistent that they could, in fact, create the basis for whole master thesis. However, the proper methodology is required to research the properties and features of archetypes. I cannot see how we will do that right now.

**In this way, we will be able to get an insight on how archetypes and perspectives work, which will be of crucial help when we attempt to construct new perspectives in problems, which have yet to have more fully identiﬁed perspectives.**

As I understood correctly, the problem solving perspective is something like the mental model (maybe it is a synonym) and it consists of a certain archetypes used. As you said in your project: “Each of these archetypes provides unique design and solution features, that may or may not be desirable, and a ***set of these archetypes fully defines a perspective***.” In my opinion it is still only a theoretical model how this works and it could be wrong. There could be several other aspects (at least psychological) that could influence the perspective creation/creating and using a mental model. Even if we can consider your claim as correct, I do not understand how you attempt to construct new perspectives. Do you want to test whether using a certain set of archetypes are doing better compared to the others? If yes, I think that it would require teaching some of your participants your new method and compared their performance with the control group. However this goal is very dependent on previous findings about the properties of the archetypes. There are a lot of questions in my mind right now and to follow this goal they would have to be answered: Are there any archetypes that are universal and we can use them in every situation? If not, in what conditions we can use a certain archetype? How one can learn these archetypes and is it possible to transfer this previous knowledge to other new problems? How will you know that you made an optimal set of archetypes that could lead to better problem solving performance? There could be many barriers and aspects that could cause that your new created perspective will not perform better. In your research, you should at least identify these possible variables and control them during your data collection.

**Finally, the ﬁnished model can be taught to subjects and in this way increase their ability of perspective identiﬁcation and improve their problem-solving skills on a general level.**

I think this could be very nice and useful application of your results, but considering previous aspects it is very dependent on your findings. In my opinion, your goals and expected results are highly connected and dependent, if you fail in first part all the others are unable to reflect.

**This project has great potential to provide insight on the world of problem perspectives. Each perspective has its own quirks, side effects, solution features and other features, that are yet to be discovered, and to understand them can provide a crucial help in selecting the optimal one for each problem. Preferably, we will also be able to understand how to initiate a perspective change and in this way create/discover new perspectives. This way, we will create a framework, that enables us to always select ’the best tool for the job’ - in this regard, the best perspective. Establishing such a gateway to the world of perspectives is an amazingly huge step towards general understanding and conquering problems.**

As in previous parts, I do not understand how you can examine how to initiate a perspective change. In fact, the issue on „How to change one´s perspective“ could be another wide area of research that could cover the whole master thesis. There are still missing plans about what methodology and materials you will use, because when you want to find out how to initiate a perspective change, you have to first examine the effect of some of your interventions that could lead to a perspective change in one´s reasoning (or something like that).

**This way, we will create a framework, that enables us to always select ’the best tool for the job’ - in this regard, the best perspective.**

I am truly sorry to be that honest but I think that this could be very dangerous and even suicidal in your master thesis. I consider this the most dangerous and ambitious plan that could fail because of many aspects during your testing. If I could give you any advice in this manner, I would not recommend setting such goals in your thesis. As you mentioned there are many different problems that are well or ill-defined and they are way too far to have some universal aspects of solving. Creating a universal list of perspectives that could allow individual to choose which one is the best for him, is impossible in this sense.

**Research question**

**What defines a problem perspective and how can we influence perspective recognition?**

**What are the features of a perspective?**

**How are they transferable?**

**Do all problems have multiple perspectives? If not, which do?**

 In the first question you ask what defines a problem perspective. This research question could be a little confusing when considering your previous claims that: „these archetypes fully define a perspective”. However as I said before, this claim could be wrong. When considering all the goals you set and also these questions, I think there is some inconsistency. These questions seem to be new for me (e.g. issue of perspective transfer – do we want to find out how to transfer a perspective or how to use some of the archetypes in order to create an optimal perspective?) and they do not fully reflect you goals set.

**My overall evaluation**

When considering the whole project, I think it is very wide and full of questions and goals that would require a broader team working on it for several years. I do not think that any of these goals and questions is bad. In my humble opinion, it just requires to choose one partial goal and go very deeply in its examination. After reading your project, I still do not know what are the dependent and independent variables, how you operationalize them, what materials will be used in testing, what are your expectations, hypotheses etc. I think that we could create several different thesis projects from your ideas and it is required to choose only one. When comparing the goals of your pilot study and your actual project, I can see that your previous project was much more integrated, straightforward, and its methodology was clear. In my opinion, these are the main aspects that are missing in the current project. Saying it in a more simple way, I can´t see what you are going to test and how it will be tested; what are the research variables and whether you will experimentally examine some interventions/compare conditions, examine some relationships or even qualitatively explore the creation of a perspective. Considering these aspects I think that this project is in an initial phase of looking for the research problem. There are some good and interesting issues and problems outlined and now it has to be reduced to smaller number of consistent goals. When doing that it is required to take the possible methodology into account.