

## Some Notes on Critical Analysis

### 1 Introduction

It is frequently the case that APEAS practice examiners will express the view that a candidate's Record of Experience or Experience Based Analysis report or Practice Paper answers lacked critical analysis. Candidates sometimes have difficulty in understanding exactly what this means. This note has been written to help you understand more clearly what is meant by critical analysis.

### 2 What is Critical Analysis?

You almost certainly were required to undertake critical analysis while doing your university studies. For example, your lecturer may have asked you to critically analyse questions relating to architecture (e.g. what can modern architects learn from Victorian architecture?). You might, therefore, be tempted to think that critical analysis is something you only do at university. This is simply not the case. Believe it or not, you actually apply aspects of critical analysis when, for example, choosing a job, buying a car or buying a computer. Critical analysis is certainly something you will need to be able to do competently as a registered, professional architect.

A search of the literature reveals a number of somewhat different definitions of the term critical analysis. While these definitions are interesting they can be difficult to interpret. Let's approach the subject from a different perspective by considering the meaning of critical and analysis separately. We will start with the word 'analysis.' A glance at some modern thesauruses reveals the following alternative words for analysis:

- breakdown, dissect, divide, separate, critique, examine, interpret, investigate

A dictionary definition of the word analysis is as follows: 'a detailed examination of the elements or structure of something' or 'the separation of something into its component parts.' (*Oxford Paperback Dictionary Thesaurus and Wordpower Guide, 1<sup>st</sup> edition*).

From the above we can see that analysis involves **breaking down** or **deconstructing** the whole subject into parts. However, analysis involves more than simply breaking a subject down, but also involves examination, interpretation or investigation of the parts with a view to identifying what this is telling us. For example, it is easier to understand how an internal combustion engine works if its operation is broken down into its various cycles, and each cycle's contribution to the overall operation of the engine is correctly interpreted. If someone presents you with some complex architectural information you will probably break this information down into separate parts and then examine it in detail so that you can understand it more readily.

Now let us consider the word critical. Reference to thesauruses reveals such alternative words as crucial, all-important, decisive, intelligent, urgent, discerning or discriminatory. Dictionary definitions include the following:

- 'expressing disapproving comments'
- 'expressing or involving an assessment of a literary or artistic work'
- 'having a decisive importance'

(*Oxford Paperback Dictionary Thesaurus and Wordpower Guide, 1<sup>st</sup> edition*).

When most people first think about the word critical their minds tend to turn to the first of the three definitions shown above. However, in the context of critical analysis the word critical means something entirely different. Critical analysis involves a very important intellectual process called critical thinking. What is involved in critical thinking? Well to start with critical thinking is not a passive process in which you simply accept what someone else says to you or what you read in a book. It is an active thinking process in which you question, evaluate, make judgements and draw

conclusions. Critical thinking must be approached with an open-mind in which all personal biases are suspended.

Now we have looked at the words critical and analysis separately we are in a better position to understand the term critical analysis. Critical analysis in the context of the Part 3 Examination will involve some or all of the processes shown below:

- identify an appropriate topic (e.g. in an Experience Based Analysis or a Record of Experience) or identify the focus of the question (e.g. in response to Practice Paper questions)
- analyse the task (s) – including breaking it down into meaningful sub-tasks if necessary
- identify any underlying assumptions
- categorise or classify information where appropriate to simplify analysis
- undertake problem solving
- question and challenge current ideas
- record facts
- gather evidence
- judge the validity and reliability of the sources of this evidence
- develop arguments/opinions based as far as possible on sound evidence
- identify connections between arguments and good practice
- form conclusions
- make recommendations

You should note from the above that critical analysis involves analysis, problem solving, questioning, and challenging ideas. Critically it also involves gathering evidence, developing arguments, and forming conclusions and recommendations based on these arguments. What are arguments? In simple terms arguments are a series of statements or opinions that should lead to a conclusion (s). Statements should be logical and coherent and based as far as possible on sound evidence. Statements do not need to be written in ‘tablets of stone;’ they can be changed as you gather more evidence about your topic, but this, in turn, will lead to changes in your conclusions and recommendations.

### **3 An example of critical analysis**

Let us now look at a topic to illustrate how critical analysis might be applied to a practical problem: that of buying a house. For the purposes of this example let us suppose that you are planning to buy a house with your partner.

So we have our topic: buying a house.

Your first step in buying a house is likely to involve your partner and you in sitting down together to decide what you are both looking for in a house. You might ask yourselves the following questions (the list is not intended to be exhaustive):

What type of property are we looking for (terrace, semi-detached or detached, bungalow etc.)?  
Are we looking for a new or older property?  
Is location important?  
Is there scope to build onto the property at a later stage?  
How many bedrooms?  
How many bathrooms?  
Does it have en suite facilities?  
Must it have a garden?  
Will we be able to park our car (s) off road? Does it have a garage?  
What can we afford?

By asking these questions (and no doubt other questions) you are engaged in a process of analysing the topic.

You and your partner may decide to go a step further and decide to categorise what you are looking for in a house in terms of essentials/desirables or in order of priorities. For example, a possible essential/desirable list may look as follows:

### **Essentials**

The house must be no more than 15 minutes drive from the local railway station as both of us have to commute to Glasgow for our work.

The house must be in the catchment area of Thistleworth Primary School.

The house must have a minimum of three bedrooms.

The house must have two bathrooms.

The house must have off-road parking.

The house must have a garden at the rear.

The house must cost less than £200,000.

### **Desirables**

It would be nice if one of the bathrooms was en suite to the main bedroom.

It would be nice if the house had a garage.

It would be nice if the house had a fourth bedroom which could be used as a study.

It would be nice if the gas boiler was new so we did not have to replace it for a while and so on ...

Up to this point you have not researched the housing market so you do not know what is available in your price range. The next step is to gather evidence of what is available in the market using the Internet and/or visiting estate agents/solicitors.

You will be able to access a lot of information electronically from the web or in hardcopy form estate agents/solicitors. How valid is this information? You conclude that while much of the information is accurate estate agents/solicitors tend to 'put a bit of gloss' on the information to attract buyers. Thus, you use this information as a starting point, but decide to visit a number of properties which provides you with more accurate information and impressions about the properties.

At the same time as you are gathering information on various properties you also visit a number of banks and building societies to see what kind of mortgage they will offer you. You discover that one bank and one building society will loan you up to £180,000 based on your combined income providing you can raise a deposit of at least 15% on the house you wish to buy. On a £200,000 house this would be £30,000. This is a real problem as your combined savings amount to only £5,000. Some problem solving is required. You review what you can sell (e.g. do we need two cars?). Will our parents loan or give us the deposit? After some considerable heart searching you decide to approach your respective parents who each agree to loan you up to £20,000 towards your deposit interest free. Problem solved.

After viewing many properties you narrow your interest down to the following three properties that you are willing to consider.

### **Property A**

Property A is a modern (only 6-years old) four bedroom, detached house with a garage and gardens to front and rear. There is a conservatory at the back of the house. The house is in excellent condition, with double glazing throughout and a modern gas boiler. Most importantly it is only ten minutes drive from the railway station. The house is priced at offers of £240,000 or over. However, the house is in the catchment area of Highfield Primary School rather than Thistleworth Primary School.

## **Property B**

Property B is a 60-year old detached house, with four bedrooms located in the country. Both your partner and you particularly like the design and construction of the house. The house has a garage and a workshop and extensive gardens to front and rear. The house has been well looked after but the kitchen is very old fashion and you would want to replace it. The house is a 30 minute drive from the railway station, and the nearest shops are at least 20 minutes drive away. You are having some difficulties finding out what school catchment area the house is in. The house is priced at offers of £195,000 or over.

## **Property C**

Property C is a 35 year old three bedroom, semi-detached house with off-road parking and a large garden to the rear. The house is a five minute drive from the railway station and the local supermarket. It is also in the catchment area of Thistledown Primary School. However, the house requires extensive upgrading including new windows and new bathroom and kitchen. The house is priced at £170,000 fixed price. You note that the house has been on the market for some time.

You are now in a position to construct some arguments for each of the three properties as follows:

## **Property A**

### Advantages

The house is in excellent condition. We would have to do minimal changes to it.  
The house is only a 10 minute drive from the railway station.  
The house has four bedrooms.  
The house has a garage.  
The house has a conservatory.

### Disadvantages

The house is not in the catchment area of Thistledown Primary School.  
At a price of £240,000 or over buying it would push us to our financial limits.

## **Property B**

### Advantages

We both like the design of this older property.  
The house has four bedrooms.  
The house has extensive gardens.  
The house has a garage and a workshop: the latter would be great for one of your hobbies of doing up old cars.  
The house is okay price wise providing we do not have to offer too much over £200,000.

### Disadvantages

The house is a 30 minute drive to the railway station. In winter the country roads could be blocked by snow.  
The house needs a new kitchen (estimated price £15,000).  
You are not certain what school catchment area the house is in.

## **Property C**

### Advantages

The house is well within our price range.  
From the house it is a five minute drive to the railway station and the supermarket.  
The house is in the catchment area of Thistledown Primary School.

### Disadvantages

The house needs extensive upgrading. Can we afford to get people to do this work for us or is this something we can do ourselves? Have we got the time to do it ourselves given our busy schedules?

### **Decision Time**

Having gathered your evidence and done your analysis your partner and you have arrived at the point when you have to make a judgement. Do you:-

Buy Property A because it has almost everything you are looking for even though it will stretch you financially?

Buy Property B because you like the design even though you may not be able to get to work in the winter time?

Buy Property C because it is well within your price range even though it requires a lot of work?

Or do you decide that all three of the above properties have too many disadvantages and simply keep looking for another house?

Whatever decision you come to, you will have a conclusion.

### **4 Other things you should know about critical analysis**

Here are a few other things you should bear in mind about critical analysis:

- To do effective critical analysis you must be a good critical reader, critical listener and critical thinker
- Most of your critical analysis should take place before you write up your report or answer Practice Paper questions
- Sitting on the fence opinion-wise is not an option with critical analysis
- In critical analysis it is possible to formulate your arguments before gathering your evidence, but you should be prepared to change your arguments if the evidence points you in another direction
- On occasions the evidence you gather as part of the critical analysis process may be limited or inconclusive. Under these circumstances you must make your arguments and judgements based on the best interpretation of the evidence available
- Remember your opinions, especially if they are based on sound arguments supported by good evidence, are as valid as another person's.

With regard to the last bullet point it may be a daunting prospect to express views that are different from someone more senior in your office. This is where you need to develop the confidence to put forward your point of view based, wherever possible, on good critical analysis. This is part of being a professional architect, and will certainly be something your examiners will be looking for in your documentary submission for the Part 3 Examination, and also at the oral interview.

### **5 What does a written response involving critical analysis look like?**

It is not possible to give a precise format for a written response involving critical analysis, because the format will depend to a large extent on whether your response is to an Experience Based Analysis topic, a Practice Paper question or an evaluation of some recent experience in your Record of Experience. However, a written response will normally have the following features:

- A statement of the topic/problem/issue
- Adequate description to allow the reader to understand clearly what the topic/problem/issues is about
- Arguments for an against each scenario (such arguments may be presented as advantages/disadvantages, pros/cons or strengths and weaknesses
- Evidence to support the arguments

- Conclusion based on your judgement of the scenario (s)
- recommendations

## **6 Critical analysis applied to architecture**

Having read this note on critical analysis why not try to apply the things you have learnt to architectural topics. You can do this on your own or as part of a study group.

Here are a few topics you might want to consider:

- Questions from recent Part 3 Practice Papers
- The pros and cons of tendering for a particular job in your office
- Some architects believe that the traditional procurement route is better than the Design and Build route. Do you agree with this view?

With regard to the last bullet point you may wish to address the question purely from the perspective of the architect or you may wish to widen the question to include the benefits and disadvantages of both routes from the prospective of the client and contractor.