Critical Analysis Report (CAR) Guidance 2019

This hand-out contains:-

1   More detailed information on the composition and structure of the Critical Analysis Report (CAR)
2   Extract from the *Professional Studies Handbook 2019*
3   Mark sheet including assessment criteria.

STRUCTURE

The word count for the CAR should be no more than 10,000 words. Above the maximum, penalties apply. The figures given below for numbers of words in each section are for guidance only, these will be different for all individual CARs. Note: the word count includes the main body of the text plus footnotes or endnotes. It does <u>not</u> include captions to illustrations, the bibliography, cover, table of contents, abstract, list of abbreviations/acronyms, any appendix, figure legends, tables, front matter, and non-substantive elements.

1   Cover

On the front cover include:

- Your Name
- Identify your document as the Critical Analysis Report
- Include the location of the project and name of the practice, type of project (Commercial/Residential, Refurb / New Build, Private / Public etc) all on the cover.
- <u>Include the word count</u>
- Make it clear in which session you are submitting in: e.g. Summer 2019
- Include the name of the course and school: "*Postgraduate Diploma in Professional Practice and Management Part 3, The Bartlett School of Architecture*" for those who joined the course *before* 2018; and "*The Bartlett School of Architecture Examination in Professional Practice in Architecture*" for candidates who joined the course in 2018 or 2019.

2   Table of Contents

3   Abstract (approx. 250 words)

The CAR can begin with a brief abstract describing in general terms your methodology and approach to the CAR topics; your aims and objectives (this corresponds with your argument/discussion topic in an essay); what you are including and what you are excluding; the key issues you are going to focus on and explore and a brief indication of your conclusions.

4   List of Abbreviations/Acronyms

Keep to a minimum and be careful that these are used sensibly, remember to correctly reference these in the text when you first use them.

5   Project Summary (approx. 500 words)

This should be a single page and should list key facts to enable the reader and in particular the professional examiners to get an overview of the project/subject of the CAR. Include the project name, building type, location, brief description of the project i.e. what is the form of contract, procurement route, costs, key players including the client and the project team, contractor, the programme, significant dates and any other essential information. Be careful to use appropriate words to describe these key facts. You might also consider providing a timeline diagram of key events.

6   Introduction/Context and Background (approx. 2000–3000 words)

This section should include a more detailed description of the scope, topics and issues you are planning to address in your CAR and this text should contain sufficient information for a 'stranger' reading the CAR to understand enough about the project in order to follow later sections where you develop the more detailed discussion/commentary and analysis of specific issues. Make sure you include plans drawing/ photos with captions which help the reader.

This section should cover some or all of the following topics (not necessarily in this order) and with the emphasis on the issues you wish to explore. There may well be other topics you wish to include. This is not a prescriptive or exhaustive list.

Some of these topics you may not have been personally involved with and have researched, others you will have first-hand knowledge of and may be the subject of the incidents described below. The introduction should make clear the level of your involvement.

- **Project Environment** - the practice, client, other stakeholders, procurement strategy
- **Project Description** - source of the project, e.g OJEU, competition, networking, client's aspirations and brief - original and final versions
- **Architect's Appointment** - fee/management and resources planning, roles and responsibilities
- **The Project Team** - appointments, dynamic, communication and analysis of their contribution, roles and responsibilities
- **Economics** - funding issues, budget estimates, cost planning, value engineering, cost reporting contract, valuations, final account figures
- **Design Development** - consultants' input, design changes
- **Regulatory Issues** – Planning and development, heritage, Sustainability, Building Regulations, Inclusive Design, Party Walls/ adjoining owners, property law rights, leases/licenses, statutory undertakers etc.
- **Health and Safety Issues** – CDM, being sure to address current legislation
- **Practice Management** - QA systems, information exchange, resource tracking
- **BIM**
- **Selection of Form of Contract -** procurement routes, tendering procedures, contractor/sub-contractors

- **Construction period** - the role of the architect may have to be re-visited e.g novation etc. site relationships and communications, quality management, managing design changes
- **Contract Administration** - contractors and subcontractors, variations/change orders, valuations, delays, claims etc.
- **Practical Completion** - post completion, feedback systems
- **Post-occupancy completion review**

7   In Depth Studies (approx. 2000–3000 words each)

The main body of the report examines and analyses at least two specific issues/areas of study and makes comments, observations and comparisons. We would suggest that one of these is pre-mobilisation and one is post-mobilisation. These issues will vary depending on CAR topics but you may wish to compare and contrast processes or activities/events with accepted best practice/processes, or alternative forms of contract procedures, or speculate on processes yet to come (e.g. a Planning issue/process, claims, fees/resources, EOTs or practical completion, handover etc.). The text should make reference to legislation and management procedures specific contract processes clauses. It is important to remember that they do not necessarily need to focus on the things that have gone wrong, but can be used to exemplify best practice.

There are many different ways of demonstrating this: see some of the examples available in the Professional Studies Office, e.g. parallel text, text boxes, different fonts, etc. These sections can be presented separately or integrated within the text as long as they are clearly identified. These may be integrated into the main body of the CAR as appropriate.

8   Conclusion (approx. 500 words)

The CAR should finish with a strong conclusion that draws together the learning outcomes derived from the overall CAR, and **relate back to the aims and objectives** that you set yourself at the beginning described in the summary/abstract. The topics covered will be different for different CAR submissions but might include in the conclusions reflections on the strengths/weaknesses; successes/failures of the processes addressed; lessons learnt; best practice principles for the future. You may also review the professional insight that you have gained from the experience on this project. In addition, you may wish to comment of the outcome from the point of view of the client, the practice, consultants/stakeholders, the local environment.

Be careful not to end abruptly!

9   Appendices

Appendices are permitted when supplementary material <u>is referred to in the text</u> and is relevant, e.g. Programme, Planning application, extracts from the contract etc. Make sure in the main text the links to the appendices are made clear.
Appendices must not be used to stretch the main exposition.

10   Bibliography

11   Illustrations/photos/diagrams/tables etc.

A picture is worth 100 words someone said once, so use photos/drawings/diagrams/tables etc to make your point. You should always have captions explaining the context. It is important to insert

any illustrations etc within the appropriate / relevant part of the text of the CAR and not as an appendix. It is particularly useful for a reader to have a site plan/photos/ basic drawings to contextualize the CAR topic at the beginning of the document. Relationships between parties involved in a project often can be simply illustrated with a diagram.

Further comments on structure
Not all CARs will follow the same structure. Remember to make sure that you are continually reviewing your progress to ensure coverage of all the areas you have chosen to explore. One of the major reasons these documents fail to satisfy the professional examiners is where there are unexplained gaps in the CAR: if you are going to only focus on specific aspects of your project this should be clearly stated in the abstract or in the introduction right at the beginning.

Remember that you are writing about something you are very familiar with, and the examiners reading your CAR for the first time will know nothing about the project, so it is essential that you put the project in context and include key information at the very beginning including site plan and or relevant drawings/photographs.

Professional examiners ALWAYS comment on spelling, punctuation, syntax and other gremlins, so do get your work read over. Firstly by someone in architecture (use your study group or mentor) who will have some idea what you are talking about, and secondly by a non-architect who will be able to tell if the CAR (and PDA) reads well and will pick out spelling mistakes etc.

A CAR is not a diary of events and must always have a substantial amount of your own critical analysis. This is essential to enable you to demonstrate that you have understood the requirements of the Part 3 criteria.

In the presentation of the CAR it may assist the reader if you make it clear which areas are the main body of the text and which are your commentary. This can be done by a change of font style or colour, graphic layout, separate columns, footnotes etc. You can decide how to do this, as there are no strict rules on how this is achieved.

There should always be a critical section at the end bringing together the analysis and conclusion. Your approach to this will develop with your text and it is never too early to think about how your professional examiner will be reading and assessing your document.

Your analysis may also take the form of observation or reflection and the you may want to consider some of the following:-

- A discussion of the successful or negative aspects of the project which may go back to early decisions and which then have impacted on the eventual outcome
- The obvious reflection may be on the lessons learned by you? The client? The practice? The contractor? The user?
- Why did the 'problems' arise? How were they dealt with? What could have been done better?
- Were there any decisions made/choices taken that impacted on the outcome?
- The performance of the team/key players
- Did it meet expectations, quality, performance/? 'commodity firmness delight'?
- What were the strengths and weakness of the project and the various processes?
- What did you/the client/the practice, the contractor/the wider society/end user get out of it?

More detailed information on composition and structure of the CAR

<u>What a CAR is not/what not to do when writing a CAR:</u>

  a) A CAR **is not** a chronological, narrative 'diary'/list of activities/events relating to a project.
  b) A CAR **does not** have to follow all RIBA work-stages 0-7.
  c) You **do not** have to have been personally involved with **all stages –** you can demonstrate your knowledge through research.
  d) **Do not** quote or put in boxes chunks of information or diagrams from standard documents/books unless they have specific relevance to the text.

EXTRACT FROM THE 2019 HANDBOOK

"Critical Analysis Report (CAR)

Introduction

The Critical Analysis Report (CAR) contributes to the candidate's professional portfolio and is a key element by which they can demonstrate their knowledge, understanding, skill and competence. The CAR is a 10,000-word analytical, in-depth report intended to demonstrate a candidate's professional judgement. These are not narrative accounts but analytical and critical reflections on the architect's powers, responsibilities and duties in the delivery of architectural services using a live project, normally within the UK.

The CAR addresses and comments on the challenges, strengths and weaknesses, and learning outcomes in specific processes, situations or issues arising; these will be identified by the candidate in agreement with the Tutor/PSA. The account should be supported by personal reflection and discussion, while drawing critical conclusions on the delivery of the aspirations of the parties involved, lessons learnt, and successes and failures of processes and relationships.

The study will normally include the examination of the industry standard work stages/procedures including appointment, brie ng, procurement strategy, tendering and delivery/administration, and completion processes of a project. However, very exceptionally, if the candidate has no direct contract administration experience, the CAR may be used to investigate and demonstrate an understanding of specific aspects of delivery of a project through shadowing, research and speculation.

The CAR is essentially work-based, research-led learning. The selection of the project topic, which the candidate has been engaged with, should be made with the knowledge and agreement of the candidate's employer. The proposed topic will then be agreed with the Tutor/PSA at the preliminary meeting.

Candidates should be aware and assured that any discussions with their Tutor/PSA in the tutorials, during the preparation stages of the CAR, and with the Professional Examiners and External Examiner at the oral examination are confidential. Only the Tutor/PSA and the Examiners get to see the CAR. Exemplars of previous CARs are available for future candidate perusal but it should be noted that they are available only with express permission of candidates (who should check with their offices). Photographing them is not permitted.

Typical CAR

The traditional format for a CAR is to review the delivery of a project through the RIBA work stages ('life cycle'). The suggested structure of a CAR will be described in the Unit descriptor available on Moodle. Candidates should note in particular the requirement for two in-depth

studies to be incorporated in the CAR – one in the early stages up to mobilisation and one post-mobilisation.

However, because this ideal model is not always reflected in the way in which projects are procured and delivered, candidates may, with their Tutor/PSA's agreement, wish to focus on specific work stages or procurement routes, but these must be set in context and address the broader issues surrounding the delivery of the project.

A project using a traditional procurement route and form of contract is a good vehicle for a CAR because it enables the candidate to demonstrate the understanding of contract administration and the architect's roles and responsibilities.

It is recognised that variations on design and build, NEC contracts, management contracting, etc. are commonly used in the construction industry, and therefore a CAR based on these types of procurement routes is acceptable. However, the candidate will still need to demonstrate adequate experience and a depth of knowledge of traditional procurement routes, through for example, compare-and-contrast analysis and critique.

The text should include drawings, plans, visualisations, photographs etc. Any key documents which might be in the appendices should be clearly referenced in the text. Appendices should be kept to a minimum. Candidates will be penalised if they exceed the word limit.

'More than one' project

Where candidates are not able to follow one project through a complete 'life cycle' – it is acceptable to consider two projects to demonstrate an understanding of issues at different work stages. This approach can be more di cult, and candidates should be careful not to leave any significant gaps in their coverage of the criteria. They should also be aware that this approach might involve a duplication of effort, and this should not be reflected in the content of the CAR.

Recent feedback from Examination Boards has been less than favourable to this approach, and we would caution candidates in its adoption.

Incomplete life cycle

If the CAR is based around a project that has an incomplete 'life cycle' (i.e. it only covers some of the work stages) candidates could hypothetically, if appropriate, speculate on the outcome of outstanding stages (e.g. practical completion, requests for extensions of time) or, alternatively, candidates may be able to demonstrate in their PEDRs or PDA that they have gained the relevant experience and understanding elsewhere of all the areas set out in the criteria.

Complex projects

Candidates working on very large complex projects, sometimes spanning a number of years, can still use these to create excellent CARs. To be successful it will be necessary to focus in detail on a speci c area with which the candidate has been personally involved. However, candidates will be required to set their topics in context, and this will probably be through research rather than rst-hand experience. Again, they will need to demonstrate the breadth of the candidate's overall experience elsewhere.

Candidates using the same project in one office at the same time

Sometimes several candidates are working on the same project in the o ce. In this instance, with the agreement of the Tutor/PSA, candidates can jointly produce the background/context parts of the CAR. It should be made clear in the submission that this is a 'group e ort'. Candidates should complete their CAR by selecting di erent issues/incidents.

Shadowing

Shadowing is, very exceptionally, an acceptable approach to the production of a CAR. It is

essentially a means of obtaining the understanding required to produce this document through observation and research, without necessarily gaining this through direct experience. Candidates should, however, remember that this is a compromise and is not welcomed by the examiners. Our advice is that candidates should only consider this as a last resort. Experience tells us that a CAR based on shadowing is more di cult and requires more e ort to achieve a pass.

'Particular' experience

Where a candidate has particular experience of a specialist nature that may be considered a suitable topic for a CAR, this should be agreed with the Tutor/PSA. However, the candidate must ensure that the PDA/PEDR/RWE demonstrates a suitable level of engagement at all the work stages and meets the ARB/RIBA criteria.

Non-UK projects

Many candidates are working for international practices or for UK practices that have a significant overseas workload. Work experience gained in these offices can produce good CARs, but do not forget that the most successful way to do this is to compare and contrast with normal UK procurement and delivery/ practice. The success of these CARs lies in the comparative analysis, which can provide the candidate with the opportunity of demonstrating an understanding of 'best practice'.

It is important to recognise that the examination and registration is predicated on competence to practise in a *UK* environment and that the CAR must somehow address UK issues. Candidates will need to demonstrate competence through their PEDRs/PDA experience. Note that recent feedback from Examination Boards has been less than favourable to this approach, and we would caution candidates in its adoption."

The Bartlett School of Architecture

Faculty of the Built Environment

Professional Studies

UCL

CRITICAL ANALYSIS REPORT (CAR) MARK SHEET

Candidate Name:	Examiner name:

AWARD		KEY QUALITIES OF CAR	Insert percentage mark for CAR here: %
(DISTINCTION)	Very High 100% High 90%	**In addition to below** • Evidence of the exceptional quality in relation to the criteria listed in the 70-89%. • Outstanding critical insights and thought provoking arguments • Evidence of ground breaking research • Presentation to an exceptionally high standard	EXAMINER COMMENTS ON CAR HERE:
	Mid 80%	**In addition to below** • Clear understanding of the evidence • Well informed by a wide range of relevant ideas • Excellent analysis, arguments and explanations • Exceptionally good structure	
		In addition to below • Very Good analysis and explanations • Very Good insight and personal reflection • Carefully structured presentation	
(MERIT)	High 68% Mid 65%	**In addition to below** • Good insight and personal reflection • Well organized and structured presentation • Good critical thinking and conclusions	
	Low 60%	**In addition to below** • Good analysis, arguments and explanations • Reasonably well structured and organized • Demonstrates good research skills	
PASS	High 58% Mid 55%	**In addition to below** • Fair analysis, critical thinking and explanation • Reasonable insight and personal reflections • Well organized presentation • Demonstrates reasonable research skills	
	Low 50%	**Pass level threshold** • An accessible, accurate and direct account • Fair analysis, argument and explanation with some remaining gaps/confusion • Fair degree of personal insight and demonstration of reflection • Reasonably well presented with reasonable referencing and bibliography	
FAIL	49-45%	• Does not address the CAR brief adequately • CAR is not to a professional standard • Weaknesses in the analysis, critical thinking, reflections and explanations • Weakly organised presentation • Incident Studies weak and poorly articulated • Lacks appropriate referencing • Errors in grammar / syntax / spelling • Prose style obscures the meaning	
	44-0%	**In addition to the above comments in the 45-49 range the work demonstrates:** • Limited Range of evidence or lack of focus • Lack of coherent argument and structure • Lack of understanding of the material presented • Incident studies are not addressed • Absence of personal insight • Serious weaknesses in organisation of document	

Please note: Distinction and Merit Award is only applied to candidates on the Postgraduate Diploma Scheme of Award (pre-2018 intake).