How to write an attractive introduction

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Abstract

The introduction in research papers plays a vital role in justifying the research's rationale to a wide audience. John Swales introduced the Create-A-Research-Space (CARS) model as a framework, outlining three key moves for structuring an effective introduction. While the CARS model has been praised for its insights into introduction analysis, it primarily focuses on structuring introductions without deeply exploring practical construction methods. This paper aims to illustrate how to practically implement the CARS model for crafting, rather than solely analyzing, a research introduction. Specifically, it will concentrate on effectively interconnecting ideas encompassed within the three rhetorical moves. Step-by-step instructions, resembling a recipe, will be presented to demonstrate how these ideas can be connected together.

研究論文の導入部は、広範な読者に研究の合理性を正当化する上で重要な役割を果たす。ジョン・スウェイルズは、効果的な導入を構築するための3つの主要な動きを概説する枠組みとして、Create-A-Research-Space (CARS) モデルを導入した。CARSモデルは、導入の分析への洞察力で称賛されているが、実践的な構築方法を深く掘り下げることなく、主に導入の構造化に焦点を当てている。本論文の目的は、研究の導入を単に分析するのではなく、CARSモデルを実践的に実装する方法を示すことである。具体的には、3つの修辞的動きに包括されるアイデアを効果的に相互接続する方法に焦点を当てる。レシピに似たステップバイステップの手順を提示し、これらのアイデアをどのようにつなぎ合わせていくかを実証する。

Keywords

the Create-A-Research-Space (CARS) model, thesis statement, introduction, logical thinking.

1. Introduction

As the opening section within the main body of an academic paper, the introduction plays an important role in engaging a diverse readership. Its primary objective is to serve as an entry point that captivates readers and invites them into the core of the paper. Achieving this effectively demands the introduction to explain the rationale behind the research, essentially addressing the question of why the study was conducted. The explanation must begin from a broad perspective, one that resonates with a wide range of readers, thereby igniting their interest and motivating them to continue reading the remainder of the paper. Accordingly, a well-crafted introduction serves a dual function. Firstly, it elucidates the underlying reasons for undertaking the research, establishing the context and significance of the study. Secondly, it accomplishes the crucial task of making this explanation accessible and engaging to as broad an audience as possible.

To help address the challenge of crafting an effective introduction, John Swales has developed a widely acclaimed model of introduction known as the Create-A-Research-Space (CARS) model. The CARS model explains the rationale of the paper by "moving from a general discussion of the topic to the particular question, issue, or hypothesis being investigated (Swales and Feek, 2012. P. 285). More specifically, Swales posits that this transition from the general to the specific can be achieved through three rhetorical moves. They are:

Move 1: Establishing a territory. Move 2: Establishing a niche. Move 3: Occupying the niche.

Move 1 sets the context for one's research, providing necessary background on the topic. Move 2 identifies a research problem or gap that needs to be filled through additional research. Move 3 presents a solution that could solve the problem and fill the gap (Swales, 1990. P. 185).

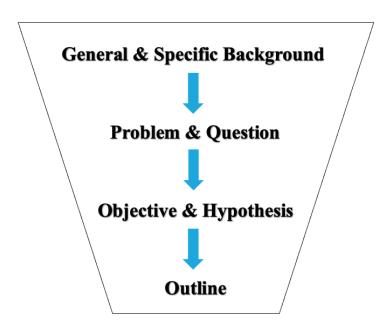
Without a doubt, the CARS model stands out as a valuable framework for analyzing introductions. It enables research writers to clearly understand how to structure an introduction to compete for a research space. However, such an understanding is limited to the perspective of *analyzing* an introduction. Note that the primary application of the CARS model is in genre analysis. Although it elucidates how the three moves can be structured by analyzing examples from various research papers, how they can be constructed in the process of crafting an introduction is not immediately apparent. More specifically, while the CARS model presents the three moves as rhetorical strategies, its primary focus is on demonstrating how these moves are articulated using appropriate academic language within a particular genre. This approach is undeniably beneficial for writers grappling with using suitable academic phraseology and terminology within a specific genre. However, it offers a somewhat high-level perspective on the link between these moves and does not delve deep into how the underlying ideas conveyed by terms and phrases can be convincingly interconnected. In particular, the CARS model falls short of demonstrating how precisely the central claim of one's research can be seamlessly integrated with previous research, leaving this critical aspect of the introduction somewhat unaddressed.

The primary goal of this paper, therefore, is to demonstrate the practical application of the CARS model in the context of crafting, rather than just analyzing, a research introduction. The exclusive focus here will be directed towards elucidating how the ideas that comprise the three rhetorical moves can be convincingly interconnected, bridging the gap between theory and practical implementation for the benefit of research writers. To achieve this goal, a series of instructions or guidelines, akin to using recipes, will be provided to demonstrate step-by-step how

these ideas can be interconnected. Through this construction approach, it will become evident that the central claim of one's research can be integrated with previous research by clearly distinguishing between their respective thesis statements.

2. The Introduction Diagram

Before we explore how to practically apply the CARS model to crafting the introduction of your research, it would be helpful to visualize the shape of the introduction. This visualization will aid in comprehending how the rationale for your research can progress from a broad discussion of the research background toward addressing the specific problem and hypothesis under investigation.



The introduction diagram here shares basically the same shape as the one used in "Overall Shape of a Research Paper (Swales and Feak 2012. p. 285), although the contents of the two are slightly different.

3. Move 1 - Establishing a Territory

Being the first move of the CARS model, *Establishing a Territory* serves to provide an introductory overview of a particular research topic within the broader context of the research field. This sets the groundwork for subsequent moves by ensuring readers grasp the topic's significance and relevance within the academic discipline.

This move includes three steps:

- Step 1 Claiming centrality.
- Step 2 Making topic generalization(s)
- Step 3 Reviewing items of previous research.

Among the three steps, Step 1 and 3 are the most common and important. Let us discuss them in turn.

Step 1 – Claiming centrality.

This step basically functions to persuade the discourse community to recognize the research being presented as a meaningful contribution to an ongoing and well-established area of study.

Here are some examples of English expressions utilized to claim centrality:

"Recently, there has been a spate of interest in ..."

Knowledge of X has great importance for ...

Step 2 – Reviewing items of previous research.

This step presents the previous research that is relevant to the topic. It needs to clearly show what has been found and who has found it.

Here is an example of the expression used to review the previous research:

Several studies have suggested that (Gordon, 2003; Ratzinger, 2009).

The examples presented here consist of common English expressions that effectively demonstrate the progression and transitions within each step of the move. These examples were extracted from research papers spanning diverse fields. Nevertheless, as I mentioned earlier, understanding how these steps are conveyed through suitable phrases and terms does not amount to understanding how to practically construct these steps. For instance, in the step involving the review of previous research, the CARS model fails to clarify the specific elements that need to be reviewed for a seamless connection between previous research and one's current research to be established.

Without further ado, let us turn to the practical implementation of these steps.

3.1. How to practically implement the steps

3.1.1. Claiming centrality.

Regarding the step of *claiming centrality*, it is crucial to note that it is the place to present an appealing background for your research. The step aims to captivate the interest of a broad spectrum of readers and compel them to actively engage with your paper.

Before introducing the core of your research and elucidating the rationale behind its undertaking, it is crucial to establish that your research is a valuable component of a larger body of significant research work, deserving the attention of readers.

To show how this step can be practically implemented, let us consider a hypothetical scenario where your research revolves around the development of a novel computer equation. To captivate your readers' attention and underscore the significance of your research, you might initiate your introduction by highlighting the transformative impact of computers on people's lives. While your readers may not be familiar with the specific importance of the computer equation you are developing, they undoubtedly comprehend the vital role computers play in modern

society. By adeptly bridging the connection between the broader relevance of computers and your unique computer equation, you can effectively arouse the curiosity of your readers, prompting their interest in delving further into the specifics of your research.

The strategy for engaging your readers effectively involves initiating your research discussion based on topics that already pique their interest and gradually weaving these themes into the narrative of your research. However, it is crucial to strike a balance by avoiding starting with information that may be considered too commonplace or trivial. The objective is to maintain and capture your readers' attention, not to risk losing it.

The recipe

	oal here is to captivate your readers' attention and underscore the significance of your research)
' /	low is the answer in (1) connected to your research? (The answer here needs not be explicitly resented in your introduction but helps you to think about the connection between the two.)

3.1.2. Reviewing items of previous research – part I (from a general perspective).

Once you have successfully captured your readers' attention regarding the significance of your research, the subsequent step involves introducing the historical evolution of research within your field that has paved the way for your current work. This provides an excellent opportunity to showcase your familiarity with previous studies in your research area.

This step is divided into two parts. The first part involves introducing the research from a broader perspective, focusing on general studies relevant to your own research. For example, if your research centers on developing a novel computer equation, the focus should be on previous research concerning computer equations that are logically connected to your work. The aim of presenting these antecedent studies is to provide readers with insight into the genesis of your research, elucidating the step-by-step progression that culminated in your present investigation.

When presenting previous studies, it is advisable to offer concise descriptions for each, including the researcher(s) name, the research's title (such as the theory or method), the publication year, and, if space permits, the research's significance. This succinct approach provides readers with a comprehensive overview of the pertinent scholarly groundwork in your field.

What is the h	roader historical origin of (or major developments before) your research? (Your answ
	ocus on general previous studies relevant to your own research.)
nere snouia j	ocus on general previous studies relevant to your own research.)

3.1.3. Reviewing items of previous research – part II (with a more specific focus).

We have now arrived at the most crucial juncture in providing the background for your research, where the focus is on pinpointing the specific previous research that served as a direct inspiration for your work. It is important to note the distinction between the previous research presented earlier and the research discussed here. The former constitutes the historical context leading to your current research, while the latter forms the foundation for the necessity of conducting your research. Indeed, if there is no direct inspiration from previous research, the question arises: why was your research undertaken in the first place?

To illustrate this point, consider a scenario where your research focus is in the realm of quantum gravity, and your objective is to enhance our comprehension of the structure of singularities in general relativity. In such a case, the research works that directly influenced your own might be the pioneering contributions of Roger Penrose and Stephen Hawking. It is worth noting that without the groundbreaking studies conducted by Penrose and Hawking on singularities in general relativity, the imperative for gaining a deeper understanding of the structure would not have arisen. Their work constitutes the inspiration for your research, and it provides the context for the significance of your own contributions in this area.

Bear in mind that the primary objective of introducing previous research at this stage is to substantiate the necessity for your own research. This can be achieved by providing a comprehensive account of the theory or method that directly inspired your work, elucidating its central claim or hypothesis and underscoring its significance in the field. More specifically, you should explain what the previous research was essentially about, i.e., what their central claim or hypothesis was. If possible, summarize their central claim or hypothesis into one simple sentence that is composed of S (subject), R (relationship), O (object), Z (circumstances). The thesis statement sentence serves as the basis for clearly identifying the distinctiveness of your research when making comparisons. Moreover, you should also explain the accomplishments of the previous research to underscore their significance in the field. Acknowledging the achievements of previous studies is as crucial as analyzing how they could be further developed.

` ′	e previous research that directly inspired yours? (Your answer here should focus on the udies that directly inspired your research.)
* *	e central claim or hypothesis of the research? (If possible, summarize the central claimes into one simple sentence that is composed of the SROZ elements.)
The central claim	/ hypothesis)
The central claim	/ hypothesis)
(Subject)	S:
(Subject) (Object) (Relationship)	S: O: R:
Subject) Object) Relationship)	S: O:
Subject) Object) Relationship) Circumstances)	S:
(Subject) (Object) (Relationship) (Circumstances)	S: O: R:

4. Move 2 - Establishing a niche

In the second move of the CARS model, research writers need to narrow down the focus from a broader research territory to a more specific area or gap within the field. They need to identify a particular problem, gap, or unresolved issue within the existing literature and emphasize its significance. This move paves the groundwork for showcasing the originality and uniqueness of the author's research.

The move includes a choice of four steps:

Step 1A Counter-claiming,

Step 1B Indicating a gap,

Step 1C Question-raising,

Step 1D Continuing a tradition.

All the four steps basically lead to the same goal, which is to explicitly identify and delineate the gap, issue, or problem found in the previous study.

Here is an example of the expression used to indicate a gap:

"While existing studies have clearly established X, they have not addressed Y."

4.1. How to practically implement the step

Building upon the foundation laid in the three steps above, this step represents the second crucial 'move' in substantiating the necessity for your research. Having elucidated the research that directly inspired your work and underscored its significance, the subsequent task is to identify the limitation or problem inherent in the theory or method proposed in that research. This critical analysis serves to justify the essential need for your own research, highlighting the gaps or challenges that remain to be addressed.

You can commence this discussion with a conjunction such as "But," "However," or "Although," immediately following the introduction of the significance of the previous research. This conjunction serves to transition smoothly from the recognition of importance to the identification of the associated limitation.

The limitation or problem you identify should maintain direct relevance to your research, acting as the cornerstone upon which your research question is formulated. When addressing the problem, it is crucial to explain its significance and why resolving or clarifying it holds importance. Ideally, you should already have a well-defined research question in mind, along with a hypothetical solution to tackle this issue. This approach ensures that your research maintains a tightly focused and purpose-driven direction.

Note that in the process of specifying the limitation or problem, it is customary to concentrate on one central problem. While there might be additional issues related to the central problem, it is advisable to direct your focus solely on the primary concern. This approach is grounded in the objective of formulating a single major research question for your study. Although it is normal to encounter multiple subsidiary questions within the broader research area, initiating your research with more than one major research question can lead to unnecessary complexity and confusion. By addressing a singular, central problem, your research maintains clarity and coherence.

	: Indicating a gap. What is the limitation / problem concerning the theory or method, etc. proposed in the previous
	research? (You should focus on the limitation / problem that is directly relevant to your research.
	Why is it important to solve or clarify the limitation / problem? (The reason should help to justif
(3)	What is your research question based on the problem / limitation? (You should formulate only on research question here.)

5. Move 3 - Occupying a niche

In the third move of the CARS model, *Occupying the niche*, the central task for research writers to accomplish is to position their work within the established niche. This requires stating the objective and hypothesis that will aid in answering the research question formulated in the previous step and emphasizing how the research will address the identified gap or problem. Authors should also outline the structure of the paper, providing an overview of its organization and flow.

This move involves the following steps:

Step 1A Outlining purposes

Expression example: "This research aims to clarify ..."

Step 1B Announcing present research

Expression example: "This paper describes ..."

Step 2 Announcing principal findings

Expression example: "The results of this study show that ..."

Step 3 Indicating research article structure

Expression example: "The outline of this paper is as follows ..."

According to Swales, Step 1A or 1B is considered obligatory for the third move. While Step 2 is rarely included, it is not uncommon for Step 3 to be incorporated into an introduction.

Let us direct our focus towards Step 1A and Step 3 in the following discussion.

5.1. How to practically implement the step

5.1.1. Outlining purposes.

The step is where you introduce your own research, following the introduction of the problem or limitation identified in previous research. However, it is not just about presenting your objective in resolving the problem or surpassing the limitation. It is equally important to articulate your research claim or thesis statement, which represents the hypothesis you are proposing.

The thesis statement, often considered the cornerstone of your research paper, forms the nucleus around which the entirety of your paper is developed and structured. Therefore, it is crucial that the thesis statement is expressed with utmost clarity, ideally in the form of a declarative sentence utilizing a non-compound structure. The statement typically adheres to the format of "S is Related to O in Z," with "S" representing the subject of the statement, "O" the object, "R" the relationship connecting S to O, and "Z" the circumstances under which this relationship holds true (for more about thesis statement and how to create one, see Lai 2022).

Having clearly expressed your thesis statement, you will be able to compare it with the thesis statement from the previous research (as shown in step 3 earlier) and highlight a significant difference between the two studies.

Additional details may be provided later in your paper to ensure that readers fully grasp your central research claim. However, what is paramount at this initial stage of constructing a thesis statement is your ability to pinpoint the fundamental elements of the statement and the relationship between them.

The recipe

St	tep 5: Outlining purposes
	(1) Based on the problem or limitation found in the previous research, what is the objective of your research? (The research objective should indicate how the gap created by the problem can be filled.)
	(2) What is the hypothesis or thesis statement of your research? (If possible, summarize the thesis statement into one simple sentence that is composed of the SROZ elements.)
	bject) S:
	oject) O:
	elationship) R:
(Ci	rcumstances) Z:
Γhis ste or thesi	Indicating research article structure. sep marks the concluding section of your paper's introduction. Following the presentation of your hypothesis is statement, you proceed to outline the sections you intend to explore in the paper, each encapsulated in a cone-sentence description.
St	tep 6: Indicating research article structure
	What are you planning to do in the other sections of your paper? (You only need to use one or two sentences to highlight your plan for each of the other sections in your paper.)

6. Putting everything together

After completing all six steps, you can now put them all together using the Introduction Template below.

The Introduction Template

- 1st Paragraph {Claiming centrality: Introducing the importance of your research area} Since ... [year/time] ... the research on ... [hallmark of the research that defines your research area (citations here)] ... has been gaining increasing popularity. This is because ... [the specific outcome in the research area (citations here)] ... has been making a huge contribution to improving / solving / changing ... [something that can be connected to the readers]
- 2nd Paragraph {Reviewing previous research 1: Introducing the general previous studies that inspired yours} Since ... [the researcher(s) who started the research (citations here)], many other studies have also added their findings/voices to the research. For example, ... [researcher(s) and his or her main claim (citations here)] ... [another researcher(s) and his or her main claim (citations here)] ... [another researcher(s) and his or her main claim (citations here)] ...
- 3rd Paragraph {Reviewing previous research 2: *Introducing the specific previous research that directly inspired yours*} Among the previous studies, the research done by ... [the researcher(s) whose research directly inspired yours (citations here)] ... stands out. He or she argues / proposes that ... [his or her main claim (citations here)] ... Specifically, [a more detailed explanation or elaboration of his or her main claim] One significant achievement of his or her research (citations here)] ...
- 4th Paragraph {Establishing a niche: Introducing the problem or limitation of the previous research that led to your research, and the research question} However, although ... [his or her research] ... has ... [rephrase the significant achievement of his or her research] ... , it has a limitation in solving / explaining ... [the problem] ... That is, [a more detailed explanation or elaboration of the problem] The question that follows from the problem is ... [the major research question that you are investigating]
- 5th Paragraph {Occupying the niche: *Introducing the objective and hypothesis of your research*} The objective of my research, therefore, is to develop / investigate / analyze / improve ... [your research objective] ... As we shall see, I will show / demonstrate / argue that ... [your research hypothesis (or thesis statement)] ...
- **6th Paragraph {Outline of your paper:** *Introducing the outline of your paper*} In particular, first, ... [one sentence summary of section 2] ... second, ... [one sentence summary of section 3] ... third, ... [one sentence summary of section 4] ... fourth, ... [one sentence summary of section 5] ...

7. The checklist

Use the checklist below to ensure that you have produced a comprehensive and satisfactory introduction.

Your introduction should encompass the following essential components:

1. The importance of your research area.

It should convey the importance and relevance of the specific research area, explaining why it merits attention and study.

2. General background about the previous studies in the area.

It should provide a broad overview of previous studies and research conducted in the field, offering context and establishing the foundation upon which your research builds.

3. Detailed account about the previous research that directly inspired yours.

It should offer an in-depth account of a specific previous research or studies that directly inspired and informed your present research. Highlight the central claim or hypothesis, together with key findings and achievements.

4. Detailed account about the problem or limitation of the research.

It should discuss any identified gaps, limitations, or unresolved issues in the previous research that you aim to address. Articulate the precise problem that your research seeks to solve or the deficiency it seeks to rectify.

5. Your hypothetical solution (i.e. thesis statement) to the problem.

It should present a clear and concise thesis statement or hypothesis that outlines your proposed solution to the identified problem or limitation.

Note:

- (i) All the components should be seamlessly interconnected in a logical and cohesive manner.
- (ii) The introduction to be produced is only preliminary and subject to ongoing revisions. It will evolve as your research progresses, and as results become finalized, the introduction may need adjustments to accurately reflect the completed work.
- (iii) Collaborating with a peer writer can be highly beneficial. Interacting with a peer writer provides an opportunity for constructive feedback, sharing ideas, and enhancing the effectiveness and quality of your writing process. Furthermore, enlisting your peer writer's assistance in reviewing the checklist can be a helpful final step in refining your introduction.
- (iv) The number of words of the introduction should not exceed 10% of the entire paper. (E.g., for a paper of 5000 words in total, the introduction should ideally be around 500 words or less (10% of 5000 words)).

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