

Swales' CARS: Creating a Research Space model of research introductions

Source: <http://libguides.usc.edu/writingguide/CARS>

Move 1: Establishing a territory

- Step 1 Claiming centrality and/or
- Step 2 Making topic generalizations and/or
- Step 3 Reviewing items of previous research

Move 2: Establishing a niche

- Step 1a Counter-claiming or
- Step 1b Indicating a gap or
- Step 1c Question-raising or
- Step 1d Continuing a tradition

Move 3: Occupying the niche

- Step 1a Outlining purposes or
- Step 1b Announcing present research
- Step 2 Announcing principal findings
- Step 3 Indicating Research article structure

Move 1: Establishing a Territory [the situation]

This is generally accomplished in two ways: by demonstrating that a general area of research is important, critical, interesting, problematic, relevant, or otherwise worthy of investigation and by introducing and reviewing key sources of prior research in that area to show where gaps exist or where prior research has been inadequate in addressing the research problem.

- Step 1 -- Claiming importance of, and/or [writing action = describing the research problem and providing evidence to support why the topic is important to study]
- Step 2 -- Making topic generalizations, and/or [writing action = providing statements about the current state of knowledge, consensus, practice or description of phenomena]
- Step 3 -- Reviewing items of previous research [writing action = synthesize prior research that further supports the need to study the research problem; this is not a literature review but more a reflection of key studies that have touched upon but perhaps not fully addressed the topic]

Move 2: Establishing a Niche [the problem]

This action refers to making a clear and cogent argument that your particular piece of research is important and possesses value. This can be done by indicating a specific gap in previous research, by challenging a broadly accepted assumption, by raising a question, a hypothesis, or need, or by extending previous knowledge in some way.

- Step 1a -- Counter-claiming, or [writing action = introduce an opposing viewpoint or perspective or identify a gap in prior research that you believe has weakened or undermined the prevailing argument]
- Step 1b -- Indicating a gap, or [writing action = develop the research problem around a gap or understudied area of the literature]
- Step 1c -- Question-raising, or [writing action = similar to gap identification, this involves presenting key questions about the consequences of gaps in prior research that will be addressed by your study. For example, one could state, "Despite prior observations of voter behaviour in local elections in urban Detroit, it remains unclear why some single mothers choose to avoid...."]
- Step 1d -- Continuing a tradition [writing action = extend prior research to expand upon or clarify a research problem. This is often signalled with logical connecting terminology, such as, "hence," "therefore," "consequently," "thus" or language that indicates a need. For example, one could state, "Consequently, these factors need to be examined in more detail...." or "Evidence suggests an interesting correlation, therefore, it is desirable to survey different respondents...."]

Move 3: Occupying the Niche [the solution]

The final "move" is to announce the means by which your study will contribute new knowledge or new understanding in contrast to prior research on the topic. This is also where you describe the remaining organizational structure of the paper.

- Step 1a -- Outlining purposes, or [writing action = answering the “So What?” question. Explain in clear language the objectives of your study]
- Step 1b -- Announcing present research [writing action = describe the purpose of your study in terms of what the research is going to do or accomplish. In the social sciences, the “So What?” question still needs to be addressed]
- Step 2 -- Announcing principle findings [writing action = present a brief, general summary of key findings written, such as, “The findings indicate a need for...,” or “The research suggests four approaches to...”]
- Step 3 -- Indicating article structure [writing action = state how the remainder of your paper is organized]

Writing tip

Swales showed that establishing a research niche [move 2] is often signalled by specific terminology that expresses a contrasting viewpoint, a critical evaluation of gaps in the literature, or a perceived weakness in prior research. The purpose of using these words is to draw a clear distinction between perceived deficiencies in previous studies and the research you are presenting that is intended to help resolve these deficiencies. Below is a table of common words used by authors.

Contrast	Quantity	Verbs	Adjectives
albeit	few	challenge	difficult
although	handful	deter	dubious
but	less	disregard	elusive
howbeit	little	exclude	inadequate
however	no	fail	incomplete
nevertheless	none	hinder	inconclusive
notwithstanding	not	ignore	inefficacious
unfortunately		lack	ineffective
whereas		limit	inefficient
yet		misinterpret	questionable
		neglect	scarce
		obviate	uncertain
		omit	unclear
		overlook	unconvincing
		prevent	unproductive
		question	unreliable
		restrict	unsatisfactory

Note You may prefer not to adopt a negative stance in your writing when placing it within the context of prior research. In such cases, an alternative approach is to utilize a neutral, contrastive statement that expresses a new perspective without giving the appearance of trying to diminish the validity of other people's research.

Examples of how this can be achieved include the following statements, with A representing the findings of prior research, B representing your research problem, and X representing one or more variables that have been investigated.

- The research has focused on A, rather than on B...
- Research into A can be useful but to counterbalance X, it is important to consider B...
- These studies have emphasized A, as opposed to B...
- While prior studies have examined A, it may be preferable to contemplate the impact of B...
- After consideration of A, it is important to also recognize B...
- The study of A has been exhaustive, but changing circumstances related to X support the need for examining [or revisiting] B...
- Although considerable research has been devoted to A, less attention has been paid to B...
- This research offers insight into the need for A, though consideration of B is also helpful...

Introductions

Source: <https://explorationsofstyle.com/2013/01/22/introductions/>

1. **Context:** What your audience will need to know in order to understand the problem you are going to confront. This background material will be familiar rather than novel to your target audience; it may act as a refresher or even a primer, but will not cover new ground. Try to form a template sentence that can then be used as a prompt to help sketch out each of the three moves. For instance, “Over the past two decades, research in this field has focused on ...”
2. **Problem (and Significance):** What isn’t yet well understood. That is, the problem statement will explain what you want to understand (or reveal or explain or explore or reinterpret or contest) and *why it will matter to have done so*. For instance, “However, [topic] is still poorly understood (or under-examined or excluded or misinterpreted). This lack of attention is significant because knowing [about this topic] will provide a benefit OR not knowing [about this topic] will incur a cost”.

Given the importance of establishing significance and given the frequency with which this step is neglected, I have often wondered about framing it as a separate step. I haven’t done so, for two reasons. First, the three moves are so well established; it seems needlessly confusing to disrupt that familiarity by talking about *four* moves. Second, and more important, the problem and significance are genuinely connected; it doesn’t make sense to treat the problem and significance separately, even if doing so would encourage us to pay more attention to the significance. The significance is requisite for the problem, not separate from it.

3. **Response:** What you are actually going to do in your research. For instance, “In order to address this problem, I will ...”

Thesis introductions

<https://explorationsofstyle.com/2013/02/20/structuring-a-thesis-introduction/>

1. **Introduction to the introduction:** The first step will be a short version of the three-move introduction [see above], often in as little as three paragraphs, ending with some sort of transition to the next section where the full context will be provided.
2. **Context:** Here the writer can give the full context in a way that flows from what has been said in the opening. The extent of the context given here will depend on what follows the introduction; if there will be a full lit review or a full context chapter to come, the detail provided here will, of course, be less extensive. If, on the other hand, the next step after the introduction will be a discussion of method, the work of contextualizing will have to be completed in its entirety here.
3. **Restatement of the problem:** With this more fulsome treatment of context in mind, the reader is ready to hear a restatement of the problem and significance; this statement will echo what was said in the opening, but will have much more resonance for the reader who now has a deeper understanding of the research context.
4. **Restatement of the response:** Similarly, the response can be restated in more meaningful detail for the reader who now has a better understanding of the problem.
5. **Roadmap:** Brief indication of how the thesis will proceed.

Some common problems to avoid when designing a research study

Source: <http://libguides.usc.edu/writingguide/designflaws>

- **Lack of Specificity** -- do not describe the investigative aspects of your study in overly-broad generalities. Avoid using vague qualifiers, such as, extremely, very, entirely, completely, etc. It's important that you design a study that describes the process of investigation in clear and concise terms. Otherwise, the reader cannot be certain what you intend to do.
- **Poorly Defined Research Problem** -- the starting point of most new research in the social sciences is to formulate a problem statement and begin the process of developing questions to address that problem. Your paper should outline and explicitly delimit the problem and state what you intend to investigate since it will determine what research design you will use [identifying the research problem always precedes choice of design].
- **Lack of Theoretical Framework** -- the theoretical framework represents the conceptual foundation of your study. Therefore, your research design should include an explicit set of logically derived hypotheses, basic postulates, or assumptions that can be tested in relation to the research problem.
- **Significance** -- the research design must include a clear answer to the "So What?" question. Be sure you clearly articulate why your study is important and how it contributes to the larger body of literature about the topic being investigated.
- **Relationship between Past Research and Your Study** -- do not simply offer a summary description of prior research. Your literature review should include an explicit statement linking the results of prior research to the research you are about to undertake. This can be done, for example, by identifying basic weaknesses in previous research studies and how your study helps to fill this gap in knowledge.
- **Contribution to the Field** -- in placing your study within the context of prior research, don't just note that a gap exists; be clear in describing how your study contributes to, or possibly challenges, existing assumptions or findings.
- **Provincialism** -- this refers to designing a narrowly applied scope, geographical area, sampling, or method of analysis that unduly restricts your ability to create meaningful outcomes and, by extension, obtaining results that are relevant and possibly transferable to understanding phenomena in other settings.
- **Objectives, Hypotheses, or Questions** -- your research design should include one or more questions or hypotheses that you are attempting to answer about the research problem underpinning your study. They should be clearly articulated and closely tied to the overall aims of your paper. Although there is no rule regarding the number of questions or hypotheses associated with a research problem, most studies in the social sciences address between one and five.
- **Poor Method** -- the design must include a well-developed and transparent plan for how you intend to collect or generate data and how it will be analysed.
- **Proximity Sampling** -- this refers to using a sample which is based not upon the purposes of your study, but rather, is based upon the proximity of a particular group of subjects. The units of analysis, whether they be persons, places, or things, must not be based solely on ease of access and convenience.
- **Techniques or Instruments** -- be clear in describing the techniques [e.g., semi-structured interviews] or instruments [e.g., questionnaire] used to gather data. Your research design should note how the technique or instrument will provide reasonably reliable data to answer the questions associated with the central research problem.
- **Statistical Treatment** -- in quantitative studies, you must give a complete description of how you will organize the raw data for analysis. In most cases, this involves describing the data through the measures of central tendencies like mean, median, and mode that help the researcher explain how the data are concentrated and, thus, leading to meaningful interpretations of key trends or patterns found within the data.
- **Vocabulary** -- research often contains jargon and specialized language that the reader is presumably familiar with. However, avoid overuse of technical or pseudo-technical terminology. Problems with vocabulary also can refer to the use of popular terms, cliché's, or culture-specific language that is inappropriate for academic writing.
- **Ethical Dilemmas** -- in the methods section of qualitative research studies, your design must document how you intend to minimize risk for participants [a.k.a., "respondents"] during stages of data gathering while, at the same time, still being able to adequately address the research problem. Failure to do so can lead the reader to question the validity and objectivity of your entire study.
- **Limitations of Study** -- all studies have limitations. Your research design should anticipate and explain the reasons why these limitations exist and clearly describe the extent of missing data. It is important to include a statement concerning what impact these limitations may have on the validity of your results.