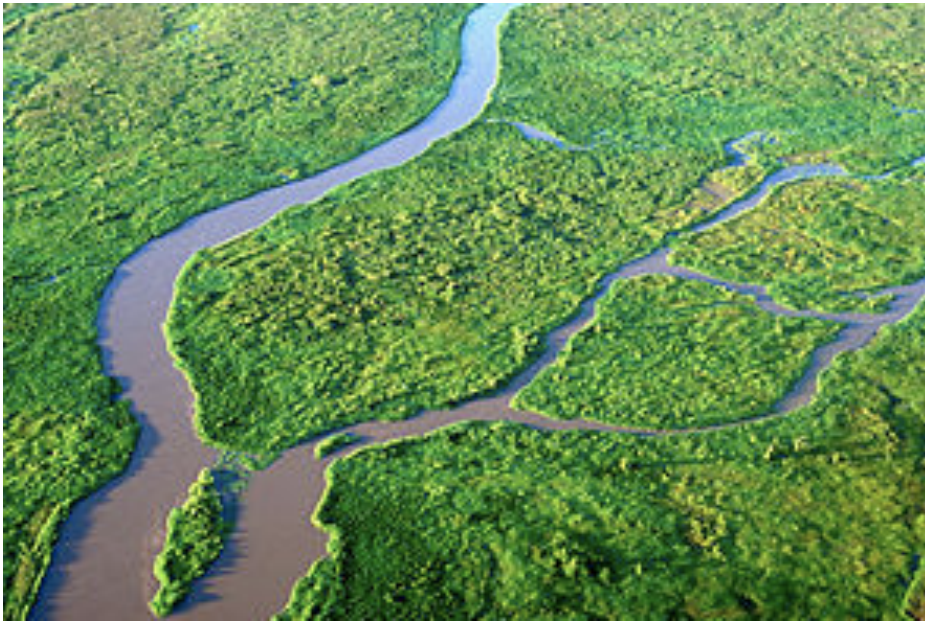# The Argumentative Strategies of CIHR OOGP Grant Writing

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Research as river

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1. **Genre theory for proposal writers**

2. **Informal arguments: how people argue**

3. **Argumentative "Moves" in proposals**

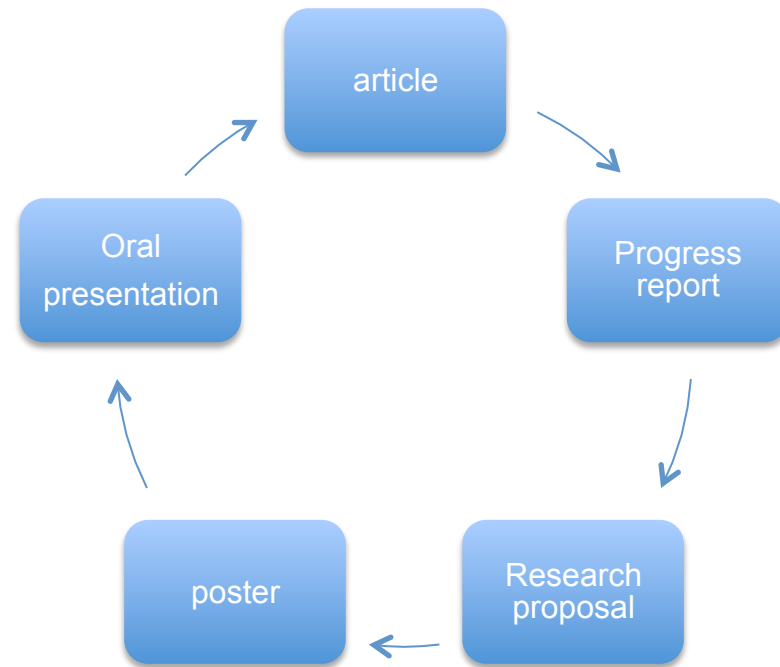4. **Document design techniques to emphasize your arguments**

Ask questions as we go

GENRE AS SOCIAL ACTION

S. Miller (1984) described genre as a rhetorical action that recurs within a social setting

The sharing of meaning is intersubjective and negotiated through discourse among the group

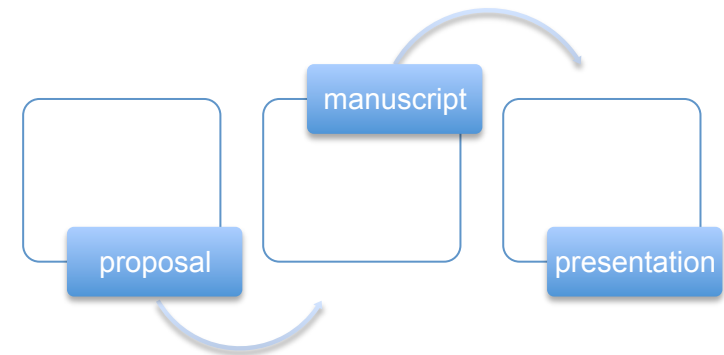These shared discourses form into typical types of documents (genres)

Genres typically do not occur alone but instead as part of a set of social actions within a group

The research article is one of a set of genres: a conference presentation, a research grant, research grant reports, peer review documents
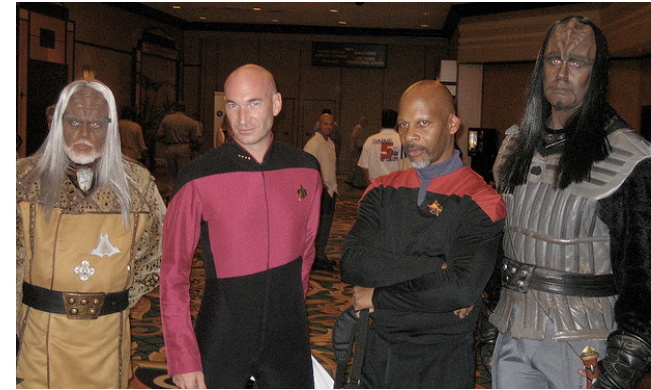
Other related documents?

manuscript

proposal

presentation

DISCOURSE COMMUNITIES

Swales (1991) developed the concept of discourse communities to explain the purposes within documents

His concept of rhetorical "moves" within documents—such as "establish a research territory"—leads to one method for establishing the typical purposes or communicative aims for a document

Research territory

Novelty

Outcomes

Gap/need

Past achievements/Credibility/Stage-setting

Objectives/Goal-setting

Others?

MOVES

What argumentative moves can you perform in a CIHR manuscript?

Sample: "Because Canada's Arctic Aboriginal peoples include diverse First Nations, Metis, and Inuit cultures in distinct settings, the Aklavik results cannot be presumed to generalize across the north."

Move: X
 X is not generalizable because these groups are diverse; therefore we need to study other groups

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Sample: "the current risk prediction framework is inadequate for identifying high-risk subgroups and accurately estimating their risk levels. . .Consequently [this leads to] underestimation of the risk for these high-risk subgroups"

Move: Previous methods obscure X ; the proposed method promises to uncover X

Informal Logic: Toulmin

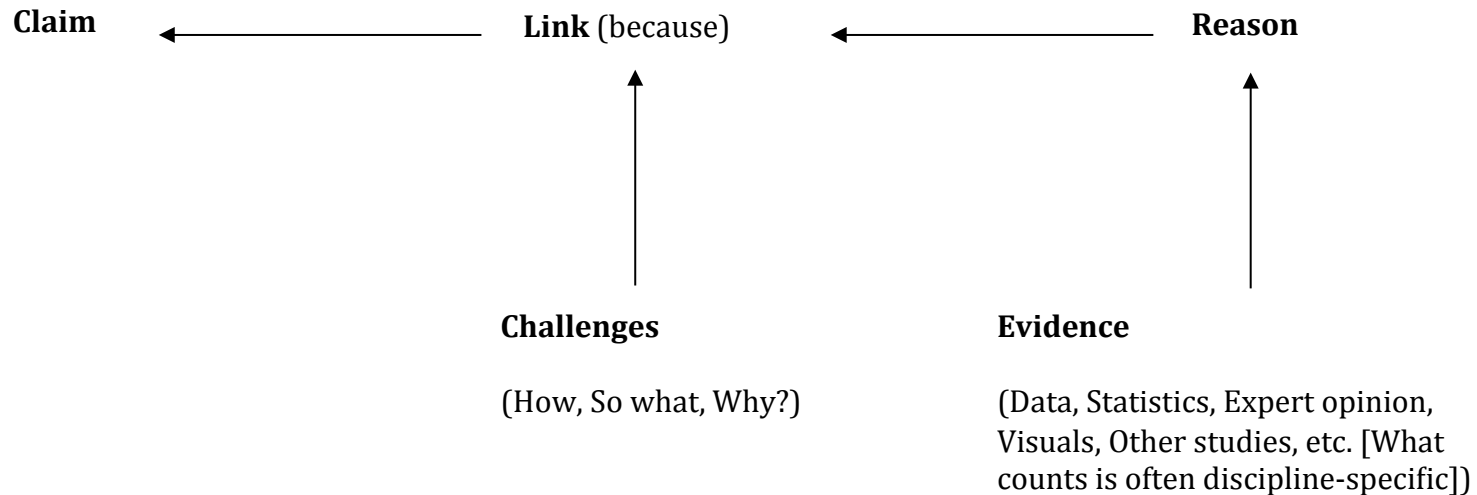**Claim is a statement: The gun registry in Canada has failed to live up to its promise of making women safer**

Claim + stated reason: The gun registry in Canada has failed to live up to its promise of making women safer because the kinds of guns used to kill women in domestic violence do not require registration.

From: "Citing a tragedy to support a farce," Matt Gurney, *National Post*, March 22, 2010: A10.

Informal Argument and Academic Writing

Claim ← Link (because) ← Reason

Challenges ↑

(How, So what, Why?)

Evidence ↑

(Data, Statistics, Expert opinion, Visuals, Other studies, etc. [What counts is often discipline-specific])

Claim + stated reason:
The gun registry in Canada has failed to live up to its promise of making women safer **because the kinds of guns used to kill women in domestic violence do not require registration**.

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- **Evidence to support stated reason (Grounds) (facts, data, statistics, testimony, examples):**

  The Aklavik research has shown that 58% of Aklavik's project participants have H. pylori infection, and among those infected there is an elevated prevalence of severe inflammation and precancerous lesions in the stomach.

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Evidence support unstated assumption (Backing)

Backing = facts, statistics, testimony, examples

"62% of 355 participants had H. pylori infection"

- Claim + stated reason rest upon an unstated reason

- Both the stated and unstated reasons rely on shared assumptions of value between the writer and the reader

- Evidence demonstrates the validity of the stated or unstated reasons

- When values are shared, less evidence is needed to convince the reader

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"Moves" are language acts that often tacit questions that grant writers answer

Moves are a way to organize the proposal

Moves create a narrative

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Establish a narrative

Research territory

Novelty

Outcomes

Gap/need

Past achievements/Credibility/Stage-setting

Objectives/Goal-setting

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"A problem exists of social and research importance (territory). Some research already exists, but there is also clearly an absence of research in a particular area (gap). The researcher(s) is/are well prepared (means) to address the problem (goal) by conducting the following study (methodology)."

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"Organ transplantation is the treatment of choice for a number of end-stage organ diseases including those involving the kidneys, liver, and lung. Cytomegalovirus (CMV) infection is the most common opportunistic viral infection in these patients and causes significant morbidity. Viral reactivation, either of donor origin or endogenous latent virus involves a complex series of steps. A number of factors contribute to CMV reactivation from latency including exogenous immunosuppression, the host immune response, and poorly characterized viral virulence factors. [1-4] Symptomatic patients are classified as having CMV disease, such as hepatitis or pneumonitis.[5] . . .

"Two strategies are commonly used for CMV prevention: . . ."

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Research territory refers to current research issues or problems

"Real world" territory refers to social problems or issues

Connect the two territories: a real world problem exists for which a research area can propose a solution

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"Based upon growing evidence of the past twenty years, there is consensus that long-term survivors of childhood cancer represent a high-risk and vulnerable population with unique health care needs; [6,7] the cumulative incidence of developing at least one chronic health condition is estimated to be over 70% 30 years after the cancer diagnosis, with a cumulative incidence of over 40% for developing severe, disabling, or life-threatening conditions or death due to a chronic condition. [2]"

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Our proposal is to focus specifically on identifying high(est)-risk subgroups and accurately estimating their risk levels through an application of "Bump Hunting", a machine-learning/data-mining method for identifying "bumps" in a target function such as the risk or rate of a late-effects event. We will initially extend the theory of Bump Hunting to censored survival data and build a computationally efficient algorithm so that the new methodology can be applied to large follow-up studies. This will be followed by analyses of two largest and highest-quality cohort studies of long-term childhood cancer survivors in the world, Childhood Cancer Survivor Study (CCSS) and Childhood, Adolescent, Young Adult Cancer Survivorship Research Program (CAYACS). The analysis of the CCSS and CAYACS databases will reflect a broad spectrum of issues for childhood cancer survivors (e.g., selected secondary cancers, cardiovascular disease, selected endocrinopathies, neurocognitive/ psychosocial, and quality of life) and those where defining risk level may have direct implications for interventions.

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Establishes that a problem exists

Provides motivation for the proposed study by implying the gap needs to be filled

"The role of the ER in the biology of myelin integral membrane glycoproteins has not been elucidated."

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"Despite increasingly aggressive prevention protocols, CMV viremia and disease are common problems. Viral load measurements have refined predictive algorithms but remain imprecise. For example, two large multicenter studies by our group have demonstrated that frequent CMV viral load measurements or monitoring of humoral immune response after prophylaxis have poor sensitivity and specificity for CMV prediction.[67, 68] An assessment of host and viral factors in patients with CMV using a translational investigative model will lead to a better understanding of the pathogenesis of CMV after transplant. This in turn will lead to better biomarkers, predictive models and improved and more precisely targeted prevention strategies."

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How the goal will be achieved, including descriptions of methods, procedures, plans, or actions and tasks

Writers demonstrate their methodological competency:

Presented the specific steps of their study

Named a theory or method that would enable them to reach the project goals

Cite Sources that Support your Methods

"Vaccinia virus (VV) is considered the prototypic poxvirus, and is amenable to genetic manipulation through a multitude of available DNA recombination tools (450). VV has also been used extensively as a gene delivery mechanism, as its large DNA genome makes it relatively easy to insert foreign DNA sequences for protein expression in mammalian cells (50, 100). Despite the fact that the natural host for VV is unknown, VV remains an excellent model in which to study virus:host interactions due to its complex genome and vat array of anti-immune mechanisms (169). In response to the selective pressures initiated by the host immune system, poxviruses such as vaccinia virus encode a vast array or proteins which modulate both innate and adaptive immune responses (Table 1.2) (21, 105)."

John Taylor, *The inhibition of apoptosis and Bax activation by mitochondrial antiapoptotic proteins encoded by vaccinia virus and ectomelia virus*, Fall 2007. (bolding added)

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"The specific aim of the proposed project is to evaluate the utility of a novel methodological paradigm for the assessment of late-effect risks that focuses on identifying high(est)-risk subgroups of survivors of childhood cancer."

Addresses writer's credibility and readiness to conduct the research

Strategies:

1. Cite their own past or ongoing research to imply connection between proposed research and their competency

2. Make explicit claims about their competency based on previous research

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"We showed that the interaction of CRT with ERp57 is disrupted if any of one G^{239}, D^{241}, and G^{243} are mutated at the tip of the P-domain.[44]"

Citing others: writers build on others' work rather than demolishing it

Citing oneself: used to enhance writer's credibility

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"These techniques are presently available in our laboratory. [99,100]"

"We have already cloned, expressed, and purified His-tagged soluble CNX and CNX C-tail."

"once identified, we will isolate cDNA encoding these proteins, followed by antibody production and biochemical, cell biological, and functional analysis as we have done in the past. [100, 116, 129, 130]"

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States the aim, general objective, chief contribution of the study

This move responds to the gap or problem identified in the proposal

"My study seeks to address this void in the demographic literature . . ."

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"At the conclusion of this project, we will be able to: (1) describe a methodology . . .; (2) communicate an initial set of results identifying . . .; (3) make an initial version . . ."

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"The principal goal of my study is to address these and other related questions and to uncover the underlying social demographic and socioeconomic factors responsible for the recent fertility rise in Alberta."

When you have a full draft, we'll get together to talk about style and design considerations

The following slides give you an idea of what that means

At this point in the process, however, it isn't profitable to focus on these areas

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Techniques that prove a framework or conceptual map for the document (headings, bulleted or numbered lists, etc.)

Help to organize the information for the reader

Help reader retrieve specific information later

Writers use SSHRC headings, as well as their own to guide readers

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Research plan/Methodology

1. Historical Context Analysis

2. Mapping Public Discourses of Fringe Finance

3. Narratives of Regulation

One proposal used a question and answer format extensively

"*Why have we generated CNX-deficient mice?*"

"*Why are we focusing on PO and PMP22?*"

TEXTUAL IDENTITY OF AUTHOR(S)

How does the author identify him or her self in the text?

No direct reference to author except parenthetical citations

Example: "Recent work with family care dyads indicates that older adults . . . slightly less emphasis on social interactions (Whitlatch et al, in press)."

Direct statement of research findings using present tense

Example: "Two interventions in particular show

promise because they address a number of issues,

including everyday decision making. . .." (Whitlatch,

p. 92).

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WHERE DOES THE AUTHOR USE "I/We"?

Do(es) the author(s) use first person singular (I) or plural (we)?
If yes, where?

Example: "The work in our laboratory is focused on elucidating the molecular mechanisms involved in quality control in the secretory pathways, protein folding, protein folding diseases, the transport and storage of Ca in the endoplasmic reticulum (ER). . . We created CNX- and ERp57-deficient mice . . .

Metadiscursive "I": We provides structural overview of the work; agency (who did what)

Where? Throughout

What is the purpose of using "I/We"?

Where do(es) the author(s) use I/We?
What is the purpose of using I/We?

Example: "Recently, we have optimised and compared different DNA extraction protocols, which enabled [us] to obtain amplifiable soybean DNA from fully refined vegetable oils (Cost, Mafra, Amaral, & Oliveira, submitted for publication)" (Costa, Mafra, AMaral, & Oliveria, "Introduction," p. 302).

We'll continue to work on the way proposals are written

Focus will be on sentence level, word level

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