ENGLISH FOR TECHNICAL WRITING:

Mid Sem.: Practical aspects of using other voices + conceptual issues (from Module B)

End Sem.: Practical aspects of using other voices + conceptual issues (from Modules A, C and E)

Internal Assessment*: Group Presentations on Framing Research Questions*

STUDY PACK

A. The Ecosystem of Research and the Objectives of Academic Writing

Diachronic and synchronic axes of research

It is important to understand that research does not emerge from a void. It is always historically situated, and today's researchers start from the research work produced by their predecessors. Even while refuting a prevalent idea or theory, one has to understand that theory and acknowledge that *something* was found by the earlier researchers which, *now*, latest research refutes. Hence, the foundational principles of research writing must emanate from the researchers' awareness of the diachronic axis of research – what has been done in the past and how it affects or influences present research – and the synchronic one – how one's writing has to resonate with the intellectual climate of the present research scenario.

Discipline-specific use of language and the dynamics of "discourses"

Understanding the nuances of research writing becomes easier if one starts with an understanding of communication genres. There is a difference between one type of communication – conditioned by its specific context – and another type of communication, conditioned by another context. For instance, when you write a novel, you use language in a specific way; when you write poetry, you write in a different way. Similarly, when you write a short story, your use of language is of one type; when you write a research paper, your use of language is different. Then, we also need to remember that it is not enough to distinguish the type of communication in the academic context from that in the non-academic context. Within the academic field, there are differences between types of research/academic communication in terms of disciplinary differences. For instance, the way one writes a research paper in the discipline of physics is not the way a literary scholar writes an academic paper. The language of auto-ethnography may be fluid, even poetic. That kind of language is unthinkable in the context of a research paper on a mathematical problem. The differences between academic writing in different disciplines is best understood in terms of "discourse" rather than language. One needs to understand that "English for technical writing" is not a single language that can be taught mechanically to researchers from all disciplines; rather, it is just an entry point to the understanding of academic discourses in different disciplines that can be framed by using the language called English. As Terry Eagleton points out, "'Language' is speech or writing viewed 'objectively', as a chain of signs without a subject. 'Discourse' means language grasped as utterance, as involving speaking and writing subjects and therefore also, at least potentially, readers or listeners" (p. 100). In other words, while producing academic writing you need to understand the following:

a) The specific disciplinary context (are you a scholar in the field of Physics, Civil Engineering or English Literature?)
b) The specific research area you are working on (is it artificial intelligence, cloning or calculus?)
c) Who your target audience/readers are in the academic community (are you addressing physicists, literary scholars or sociologists?)
d) What type of *discourse* is mandated by your discipline?

'Paradigm shifts' in research and concomitant stylistic shifts in academic writing

Research, however, is not a static thing. What is considered a fact today may be proved wrong by researchers in the future. One needs to understand that research writing, too, evolves over time. Thomas Kuhn came up with the concept of "paradigm shifts" in the context of radical conceptual and semantic shifts in the course of "scientific revolution". As Alexander Bird reminds us:

> In *The Structure of Scientific Revolutions* Kuhn asserts that there are important shifts in the meanings of key terms as a consequence of a scientific revolution. For example, Kuhn says:
>
> > … the physical referents of these Einsteinian concepts are by no means identical with those of the Newtonian concepts that bear the same name. (Newtonian mass is conserved; Einsteinian is convertible with energy. Only at low relative velocities may the two be measured in the same way, and even then they must not be conceived to be the same.) (Bird, "Thomas Kuhn")

One, thus, needs to understand that, the semantic shifts, and the shifts in the patterns of scientific thought would obviously lead to concomitant shifts in discursive styles and patterns of academic writing. Precisely, after Einstein, you cannot write on physics in the way Newton wrote. However, in order to understand the current shifts in scientific thought (including revolutionary ones) and their impact on the style of academic writing, you need to continuously read the latest research papers in your discipline. That is how one can keep track of the latest stylistic shifts, if any, in one's discipline.

Target audience; anticipating the response of the reader

As we have already seen, academic discourse is not just language, it is language-in-practical-communication. When you are writing a paper you are writing it to be read by specific readers. Before determining the suitable style for your paper, you need to think about the target audience: are they only scholars? Or lay readers as well? Are they readers from different disciplines? Or from your own? Are they aware of the key terms which are part of the common vocabulary of your own discipline? Which journal are you writing for? What are its aims and scope? Does it encourage inter-disciplinary thinking? Or does it ask you to stick strictly to a specific discipline? Are you writing for a journal that encourages cutting edge research in your field? You are of course addressing a faceless audience and the peer reviewer is anonymous and hence faceless too. However, you of course have an intended audience. If you are a physicist you are obviously not writing your paper primarily for medical practitioners; if you are a sociologist, your primary audience is obviously not a group of poetry scholars. However, in the case of interdisciplinary research, it becomes more challenging to understand or anticipate the audience. Hence, in the case of interdisciplinary research you need to make your idioms more accessible to people across disciplines. You might have to include brief explanations of terms that are known to everyone in your own discipline but not to the scholars from other disciplines.

Compatibility between writing style and academic/research context

Your writing style must be compatible with the exact research context. Are you trying to describe a piece of social reality (ethnography)? Are you conveying the results of a scientific experiment (medical science/chemistry etc.)? Are you presenting the interpretation of a text or analysing a discourse (literary studies/philosophical hermeneutics)? Are you confident about the statements you

are making? Are you absolutely sure about the outcome of your laboratory experiment? Then, your language must exhibit confidence and certainty. Do you think that your statistical analysis of some socio-economic reality may not capture the reality in its entirety? Then, use words and expressions that show humility on your part and acknowledge the possibility of your findings being incomplete. In the fields of social sciences, the gap between statistical data and lived reality can be ethically and authentically acknowledged only when your stylistic registers involve the expressions of uncertainty, as the society you are exploring is not like a laboratory where things can be controlled with mathematical precision.

Academic intertextuality

In the academic field, the discourse we use is always informed by discursive patterns and styles used by other scholars in recent and/or distant past. The styles and patterns of writing - the tone of your writing - is supposed to resonate with those in the writings of others in your discipline. That does not mean that your write-up should echo others'; what it implies is that your writing is not sui generis - it is to be situated within an already established order of discursive styles sanctioned by your discipline. Here too – the best way to succeed is to keep track of the writing styles of the contemporary scholars in your discipline.

Sensing the zeitgeist of the contemporary academia

It is very important to feel the pulse of the contemporary academy as far as your discipline is concerned. What type of exploration and what type of academic language does it entertain? What kind of intellectual climate informs the present academic scenario in your discipline? Are you going to challenge the received ideas in your discipline? Do you, then, have enough confidence that you can prove/validate what you argue for? Then, you have to make sure that your language – or rather discourse – integrates humility and confidence. Your tone should be simultaneously humble and confident but should not sound boastful. As we have already seen, research writing requires a good understanding of the present as well as the past – the synchronic as well as the diachronic axis of research.

B. Research Writing: Basic Principles and Technical Aspects

Read the study material for this module circulated among the students (the PDF titled "ETW Module B Study Material")
Source:
library.leeds.ac.uk. https://library.leeds.ac.uk/info/14011/writing/106/academic_writing

C. Plagiarism, Copyright and Citation

Need for citing others' writings

Research is not something that is conducted by a solitary individual; you are always working within a research community. You may work alone; you may work in a group. However, in every case, you are drawing on, using, conversing with or arguing with what the other researchers in your field have said or are saying. If you are not aware of what the other researchers have done or are doing then your research will be feeble and incomplete. Hence, it is important to acknowledge your debt to the entire research community of which you are a part, and to cite, properly, their works which you cannot but use to produce your own piece of research writing.

- What is plagiarism and how to avoid it?

- What is copyright infringement and what is “fair use”?
- Reference stylesheets and methods of citation (to be discussed and demonstrated in class)

For this module, read the relevant portions in the essay by Miguel Roig which is shared with you, “Avoiding plagiarism, self-plagiarism, and other questionable writing practices: A guide to ethical writing”. Check the PDF shared with you, titled **“ETW Module C Study Material”**

D. Research Questions

- How to articulate /state a research problem /question?
- How to write an abstract?
- Essential features of an academic abstract

Please consult the study material below:

Source: The Writer’s Handbook by UW-Madison Writing Center, https://writing.wisc.edu/handbook/assignments/writing-an-abstract-for-your-research-paper/

Writing an Abstract for Your Research Paper

Definition and Purpose of Abstracts

An abstract is a short summary of your (published or unpublished) research paper, usually about a paragraph (c. 6-7 sentences, 150-250 words) long. A well-written abstract serves multiple purposes:

- an abstract lets readers get the gist or essence of your paper or article quickly, in order to decide whether to read the full paper;
- an abstract prepares readers to follow the detailed information, analyses, and arguments in your full paper;
- and, later, an abstract helps readers remember key points from your paper.

It’s also worth remembering that search engines and bibliographic databases use abstracts, as well as the title, to identify key terms for indexing your published paper. So what you include in your abstract and in your title are crucial for helping other researchers find your paper or article.

If you are writing an abstract for a course paper, your professor may give you specific guidelines for what to include and how to organize your abstract. Similarly, academic journals often have specific requirements for abstracts. So in addition to following the advice on this page, you should be sure to look for and follow any guidelines from the course or journal you’re writing for.

The Contents of an Abstract

Abstracts contain most of the following kinds of information in brief form. The body of your paper will, of course, develop and explain these ideas much more fully. As you will see in the samples below, the proportion of your abstract that you devote to each kind of information—and the sequence of that information—will vary, depending on the nature and genre of the paper that you are summarizing in your abstract. And in some cases, some of this information is implied, rather than stated explicitly. *The Publication Manual of the American Psychological Association*, which is widely

used in the social sciences, gives specific guidelines for what to include in the abstract for different kinds of papers—for empirical studies, literature reviews or meta-analyses, theoretical papers, methodological papers, and case studies.

Here are the typical kinds of information found in most abstracts:

1. the **context** or background information for your research; the **general topic** under study; the **specific topic** of your research
2. the **central questions** or statement of the **problem** your research addresses
3. **what's already known** about this question, what **previous research** has done or shown
4. the main **reason(s)**, the exigency, the **rationale**, the **goals** for your research—Why is it important to address these questions? Are you, for example, examining a new topic? Why is that topic worth examining? Are you filling a gap in previous research? Applying new methods to take a fresh look at existing ideas or data? Resolving a dispute within the literature in your field? . . .
5. your research and/or analytical **methods**
6. your main **findings**, **results**, or **arguments**
7. the **significance** or **implications** of your findings or arguments.

Your abstract should be intelligible on its own, without a reader's having to read your entire paper. And in an abstract, you usually do *not* cite references—most of your abstract will describe what *you* have studied in your research and what *you* have found and what *you* argue in your paper. In the body of your paper, you will cite the specific literature that informs your research.

When to Write Your Abstract

Although you might be tempted to write your abstract first because it will appear as the very first part of your paper, it's a good idea to wait to write your abstract until *after* you've drafted your full paper, so that you know what you're summarizing.

What follows are some sample abstracts in published papers or articles, all written by faculty at UW-Madison who come from a variety of disciplines. We have annotated these samples to help you see the work that these authors are doing within their abstracts.

Choosing Verb Tenses within Your Abstract

The **social science** sample (Sample 1) below uses the present tense to describe general facts and interpretations that have been and are currently true, including the prevailing explanation for the social phenomenon under study. That abstract also uses the present tense to describe the methods, the findings, the arguments, and the implications of the findings from their new research study. The authors use the past tense to describe previous research.

The **humanities** sample (Sample 2) below uses the past tense to describe completed events in the past (the texts created in the pulp fiction industry in the 1970s and 80s) and uses the present tense to describe what is happening in those texts, to explain the significance or meaning of those texts, and to describe the arguments presented in the article.

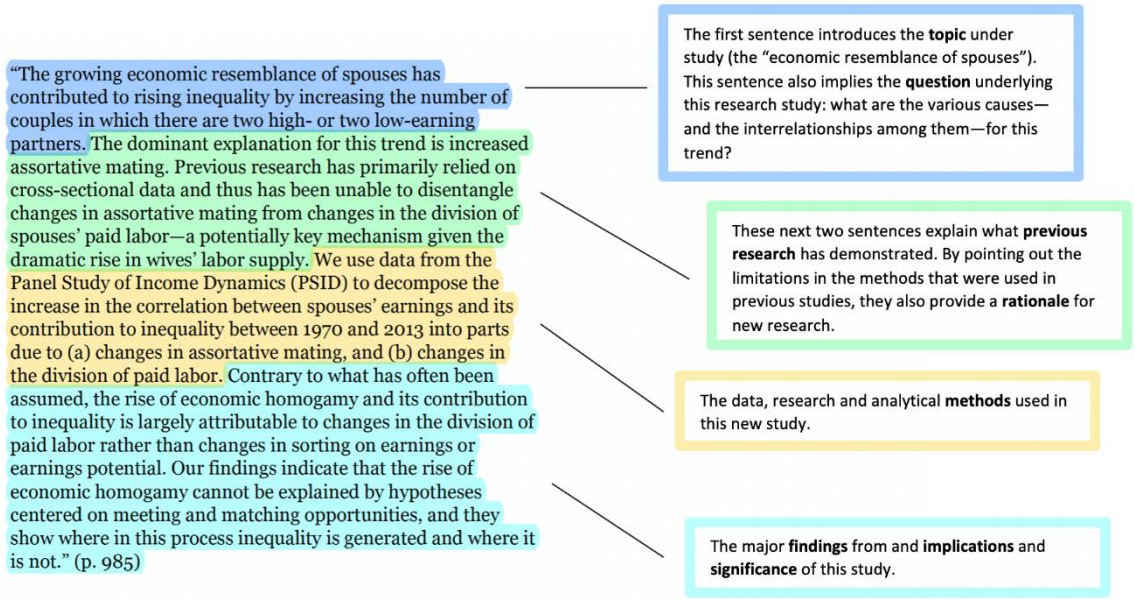
The **science** samples (Samples 3 and 4) below use the past tense to describe what previous research studies have done and the research the authors have conducted, the methods they have followed, and what they have found. In their rationale or justification for their research (what remains to be done), they use the present tense. They also use the present tense to introduce their study (in Sample 3, "Here we report . . .") and to explain the significance of their study (In Sample 3, This reprogramming . . . "provides a scalable cell source for. . .").

Sample Abstract 1

From the social sciences

Reporting new findings about the reasons for increasing economic homogamy among spouses

Gonalons-Pons, Pilar, and Christine R. Schwartz. "Trends in Economic Homogamy: Changes in Assortative Mating or the Division of Labor in Marriage?" *Demography*, vol. 54, no. 3, 2017, pp. 985-1005.

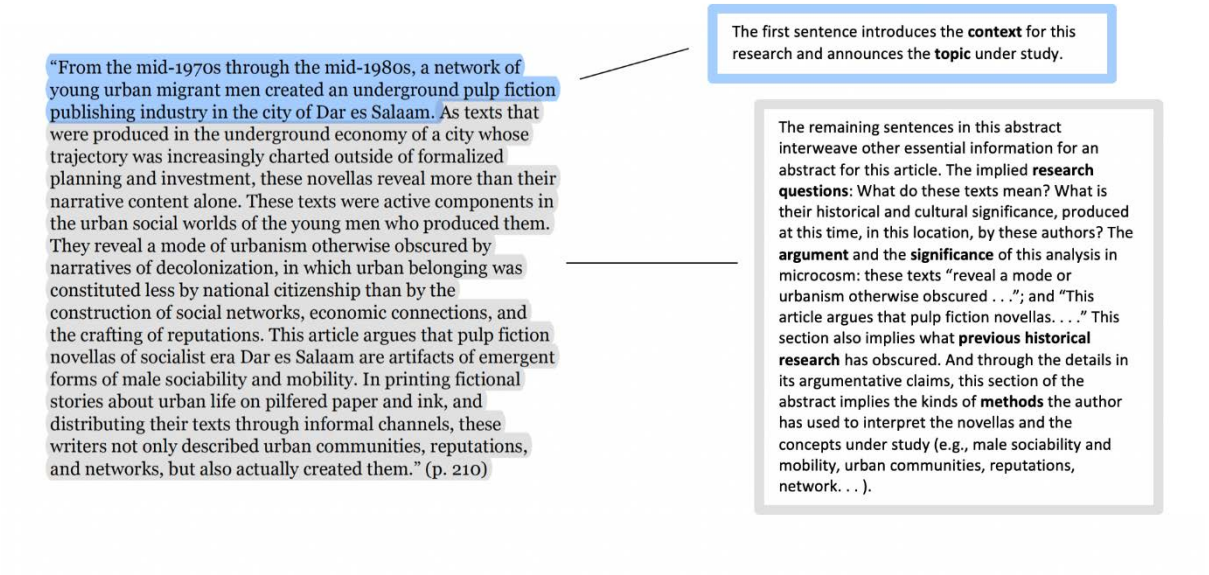


Sample Abstract 2

From the humanities

Analyzing underground pulp fiction publications in Tanzania, this article makes an argument about the cultural significance of those publications

Emily Callaci. "Street Textuality: Socialism, Masculinity, and Urban Belonging in Tanzania's Pulp Fiction Publishing Industry, 1975-1985." *Comparative Studies in Society and History*, vol. 59, no. 1, 2017, pp. 183-210.

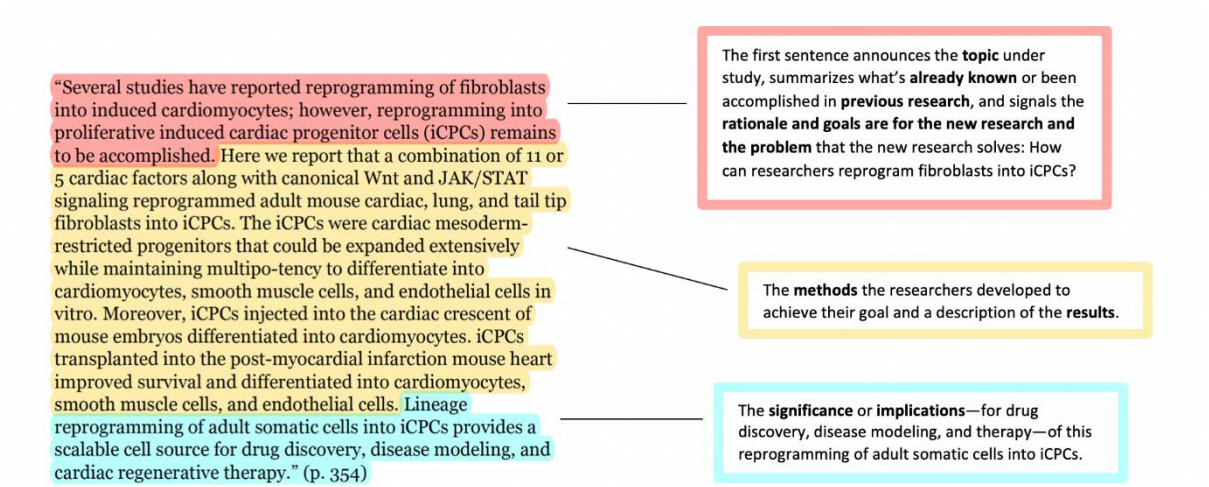


Sample Abstract/Summary 3

From the sciences

Reporting a new method for reprogramming adult mouse fibroblasts into induced cardiac progenitor cells

Lalit, Pratik A., Max R. Salick, Daryl O. Nelson, Jayne M. Squirrell, Christina M. Shafer, Neel G. Patel, Imaan Saeed, Eric G. Schmuck, Yogananda S. Markandeya, Rachel Wong, Martin R. Lea, Kevin W. Eliceiri, Timothy A. Hacker, Wendy C. Crone, Michael Kyba, Daniel J. Garry, Ron Stewart, James A. Thomson, Karen M. Downs, Gary E. Lyons, and Timothy J. Kamp. "Lineage Reprogramming of Fibroblasts into Proliferative Induced Cardiac Progenitor Cells by Defined Factors." *Cell Stem Cell*, vol. 18, 2016, pp. 354-367.



Note: This journal calls this paragraph at the beginning of the article a "Summary," rather than an "Abstract." This journal provides multiple ways for readers to grasp the content of this research article

quickly. In addition to this paragraph-length prose summary, this article also has an effective graphical abstract, a bulleted list of highlights list at the beginning of the article, and a two-sentence "In Brief" summary.

Sample Abstract 4, a Structured Abstract

From the sciences

Reporting results about the effectiveness of antibiotic therapy in managing acute bacterial sinusitis, from a rigorously controlled study

Note: This journal requires authors to organize their abstract into four specific sections, with strict word limits. Because the headings for this structured abstract are self-explanatory, we have chosen not to add annotations to this sample abstract.

Wald, Ellen R., David Nash, and Jens Eickhoff. "Effectiveness of Amoxicillin/Clavulanate Potassium in the Treatment of Acute Bacterial Sinusitis in Children." *Pediatrics*, vol. 124, no. 1, 2009, pp. 9-15.

Abstract

"OBJECTIVE: The role of antibiotic therapy in managing acute bacterial sinusitis (ABS) in children is controversial. The purpose of this study was to determine the effectiveness of high-dose amoxicillin/potassium clavulanate in the treatment of children diagnosed with ABS.

METHODS: This was a randomized, double-blind, placebo-controlled study. Children 1 to 10 years of age with a clinical presentation compatible with ABS were eligible for participation. Patients were stratified according to age (<6 or ≥6 years) and clinical severity and randomly assigned to receive either amoxicillin (90 mg/kg) with potassium clavulanate (6.4 mg/kg) or placebo. A symptom survey was performed on days 0, 1, 2, 3, 5, 7, 10, 20, and 30. Patients were examined on day 14. Children's conditions were rated as cured, improved, or failed according to scoring rules.

RESULTS: Two thousand one hundred thirty-five children with respiratory complaints were screened for enrollment; 139 (6.5%) had ABS. Fifty-eight patients were enrolled, and 56 were randomly assigned. The mean age was 6630 months. Fifty (89%) patients presented with persistent symptoms, and 6 (11%) presented with nonpersistent symptoms. In 24 (43%) children, the illness was classified as mild, whereas in the remaining 32 (57%) children it was severe. Of the 28 children who received the antibiotic, 14 (50%) were cured, 4 (14%) were improved, 4(14%) experienced treatment failure, and 6 (21%) withdrew. Of the 28children who received placebo, 4 (14%) were cured, 5 (18%) improved, and 19 (68%) experienced treatment failure. Children receiving the antibiotic were more likely to be cured (50% vs 14%) and less likely to have treatment failure (14% vs 68%) than children receiving the placebo.

CONCLUSIONS: ABS is a common complication of viral upper respiratory infections. Amoxicillin/potassium clavulanate results in significantly more cures and fewer failures than placebo, according to parental report of time to resolution." (9)

Some Excellent Advice about Writing Abstracts for Basic Science Research Papers, by Professor Adriano Aguzzi from the Institute of Neuropathology at the University of Zurich:

https://twitter.com/AdrianoAguzzi/status/1153307597921017857

E. Academic Writing in the Age of Inter-disciplinary Research

- **Cross-disciplinarity, multi-disciplinarity and trans-disciplinarity**

Please see the following study material
Source: Ohio State University
website, https://globalartsandhumanities.osu.edu/research/cross-disciplinary-research

Why Cross-Disciplinary Research Matters

What is cross-disciplinary research?

Cross-disciplinary research refers to research and creative practices that involve two or more academic disciplines. These activities may range from those that simply place disciplinary insights side by-side to much more integrative or transformative approaches. The term encompasses the following approaches:

- **Multidisciplinary research** is informed by different disciplinary perspectives and methods, which are brought together to address a common problem or issue.
- **Interdisciplinary research** is based upon a conceptual model that integrates theoretical frameworks from different disciplines. It uses study design and methodology that is not limited to any one field, and it requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process.
- **Transdisciplinary research** is defined as research efforts conducted by investigators from different disciplines working jointly to create new conceptual, theoretical, methodological and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem or issue.

(Adapted from hsph.harvard.edu)

Why does cross-disciplinary research matter?

- Provides an understanding of complex social challenges and community responses to issues such as climate change, migration, poverty, mass incarceration and addiction that require a multifaceted approach to solve.
- Combines disciplinary breadth with the ability to collaborate and synthesize varying expertise.
- Enables researchers to reach a wider audience and communicate diverse viewpoints.
- Encourages researchers to confront questions that traditional disciplines do not ask while opening up new areas of research.
- Promotes disciplinary self-awareness about methods and creative practices.

Please read the following study material

Source:

https://pubmed.ncbi.nlm.nih.gov/17330451/

Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness

Bernard C K Choi , Anita W P Pak

Abstract

Background/purpose: Teamwork involving multiple disciplines is increasingly emphasized in health research, services, education and policy. The terms multidisciplinary, interdisciplinary and transdisciplinary are increasingly used in the literature, but are ambiguously defined and interchangeably used. This paper is the first of two in a series. It discusses the definitions, objectives, and evidence of effectiveness of such teamwork.

Methods: The paper is a literature review based on dictionaries, and Google and MEDLINE (1982-2006) searches.

Results: Multidisciplinarity draws on knowledge from different disciplines but stays within their boundaries. Interdisciplinarity analyzes, synthesizes and harmonizes links between disciplines into a coordinated and coherent whole. Transdisciplinarity integrates the natural, social and health sciences in a humanities context, and transcends their traditional boundaries. The objectives of multiple disciplinary approaches are to resolve real world or complex problems, to provide different perspectives on problems, to create comprehensive research questions, to develop concensus clinical definitions and guidelines, and to provide comprehensive health services. Multiple disciplinary teamwork has both benefits and drawbacks.

Conclusion: The three terms refer to the involvement of multiple disciplines to varying degrees on the same continuum. The common words for multidisciplinary, interdisciplinary and transdisciplinary are additive, interactive, and holistic, respectively. With their own specific meanings, these terms should not be used interchangeably. The more general term "multiple disciplinary" is suggested for when the nature of involvement of multiple disciplines is unknown or unspecified. While multiple disciplinary teamwork is appropriate for complex problems, it is not always necessary in every single project.

Please read the following:

Source: https://globalartsandhumanities.osu.edu/news/why-cross-disciplinary-research-matters-interview-amy-youngs

FEBRUARY 20, 2020

Why Cross-Disciplinary Research Matters: An Interview with Amy Youngs

Image

Description

The following interview of Amy Youngs was conducted by Global Arts + Humanities Discovery Theme Program Manager Puja Batra-Wells. Youngs is an associate professor in The Ohio State University Department of Art. Youngs creates biological art, interactive sculptures and digital media works that explore relationships between technology and our changing concept of nature and self. Research interests include interactions with plants and animals, technological nature follies, constructed ecosystems and seeing through the eyes of machines.

Puja Batra-Wells: Tell us about your current work/project: To what degree are cross-disciplinary perspectives or methods important to your practice?

Amy Young: I've been exploring how art and technology can be deployed to redirect human attention towards the non-human world. Can our seductive, interactive tech devices coax us into engaging with the actual, mattering, living world? One of my recent artworks takes the form of an augmented-reality cell phone app that guides participants on a walk in a public park. In *Becoming Biodiversity*, you inhabit the perspective of non-humans who live there: birds, plants, fungi, ants, and muskrats. There is an eco-narrative that includes the human in the network of symbiotic relationships on the site. Science, particularly ecology, is important in my work, even though I have no formal training in it. I began the research for this project at Mountain Lake Biological Research Station in Virginia, where I had access to scientists who were studying the ants, plants, birds and fungi living naturally on that site. I interviewed them about their research but also asked them questions about the world views of their subjects, which sometimes made them uncomfortable because the discipline of science does not allow them to anthropomorphize.

The specific site for my project emerged from a research residency I did at the New York Urban Field Station. I spent time with park rangers, birders, ecologists, neighborhood kids, and joined park stewardship activities so I could get to know Flushing Meadows Corona Park through multiple perspectives. Citizen science methods became particularly useful, both for developing my own observations, and for getting a view of other people's observations of the site throughout multiple seasons. I used an app called iNaturalist, which helps users identify species of plants and animals based on uploaded, geotagged images. At the same time, I was learning how to create my own app, which required specific technical knowledge outside of my comfort zone. I was fortunate to be able to work with a 3D animation artist, a sound artist, and a programmer, and each brought important skills to the project as well as sensibilities that helped shape it.

PBW: What do you see as the major challenges of doing cross-disciplinary artwork? What do you find most rewarding?

AY: It can be a challenge to evaluate this type of work in academia. It does not easily fit into the models within which we are promoted, so the quality of the work is sometimes not trusted. Is it valued in the world of science or art? Both, or neither?

Developing working relationships across disciplines takes extra time since we don't have a clear understanding of each other's practices. Once trust is developed and overlapping motivations can be leveraged, the work is incredibly engaging. I have learned so much from an ongoing collaboration with professor Iris Meier in the Department of Molecular Genetics. We have been teaching an art and science class together that has allowed us to take interesting risks with our teaching and research. When things are going really well, we have been able to include all of the students in the class as co-designers and co-creators of art installations that engage her scientific research. Last semester, we created an installation that invited people to walk through an inflatable stomata (plant pore), where they would sit inside a soft sculptural leaf interior, don virtual reality goggles, and continue on as a carbon particle floating through the 3D modelled interiors of plant structures and cells. Together, we named this hybrid project *Un-becoming Carbon: Traveling in Intercellular Space*. It is something I never would have come up with on my own, and it certainly could not have been accomplished without this particular team.

PBW: What ethical considerations drive your interest in the interdependencies between the human and the non-human?

AY: An ethic of belonging motivates me. How does the human species fit into ecosystems? What do we offer, and what do we take? How can we become better citizens of the earth? These giant questions are unapproachable in the abstract. My personal experiences with raising animals as a kid in 4-H and with keeping plants and composting worms, grounded my understanding of myself as belonging to a larger community. The categories we use to describe our species' relationships with other species are inadequate: pets, food, labor, entertainment. Interacting with a colony of composting worms over 20 years has taught me about a wider range of sustained relationships we have with non-humans. For instance, they transform my household waste into rich fertilizer that I feed to my garden plants, which helps them grow into edibles or tomatoes that eventually travel through my own body. Plant clippings and veggie scraps go back into the worm bin, where they cycle back through the system. I care for the worms as if they are a part of my extended body, because they are. When I purchase items from the store, I consider the worms, "will they like this Styrofoam box?" No. I'll get the product in the cardboard packaging that they can eat.

Interdependence is highlighted in much of my artwork because the fact that we are interconnected with a larger community of living things is intimate and beautiful, yet also uncomfortable. It reminds us of our vulnerability. I hope to focus attention on developing good relationships with the living and non-living things that make our lives possible.

PBW: In one sentence, what is the value of cross-disciplinary research to your field?

AY: Art can do things that other disciplines cannot do, and vice-versa, but when we are working together new possibilities emerge that expand the questions, the methods, the knowledge, and problem-solving potentials.

- **Stylistic mixing and "blurred genres"**

In the context of interdisciplinary research, stylistic purity or discursive homogeneity is impossible and obviously unwelcome. Styles get mixed and stylistic hybridity, in such research contexts, is not just accepted but rather encouraged. As Clifford Geertz points out in his famous essay, “Blurred Genres”:

> Certain truths about the social sciences today seem self-evident. One is that in recent years there has been an enormous amount of genre mixing in social science, as in intellectual life generally, and such blurring of kinds is continuing apace. Another is that many social scientists have turned away from a laws-and-instances ideal of explanation toward a cases-and-interpretations one, looking less for the sort of thing that connects planets and pendulums and more for the sort that connects chrysanthemums and swords. Yet another truth is that analogies drawn from the humanities are coming to play the kind of role in sociological understanding that analogies drawn from the crafts and technology have long played in physical understanding. I not only think these things are true, I think they are true together; and the culture shift that makes them so is the subject of this essay: the refiguration of social thought. (p. 165)

While you are engaged in interdisciplinary research you can take more freedom and can keep your style flexible. That, however, does not mean that you can write in any style you wish. The basic requirements of academic writing remain the same, though more flexibility is enjoyed by the researcher. Besides, if you are using jargon specific to your original discipline, then you have to explain it so that your audience is able to understand what you are speaking of.

References:

Bird, Alexander, "Thomas Kuhn", *The Stanford Encyclopedia of Philosophy* (Spring 2022 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2022/entries/thomas-kuhn/>.

Eagleton, Terry. *Literary Theory: An Introduction*. 2nd edition. University of Minnesota Press, 1996.

Geertz, Clifford. “Blurred Genres: The Refiguration of Social Thought.” *The American Scholar* , Spring 1980, Vol. 49, No. 2 (Spring 1980), pp. 165-179. Stable URL: https://www.jstor.org/stable/41210607.

Further Reading:

Books:

- Chris Hart, *Doing Your Masters Dissertation*, Sage
- Hilary Glasman-Deal, *Science Research Writing for Non-native Speakers of English*, Imperial College Press, World Scientific Publishing Co.
- Margaret Cargill and Patrick o’ Connor, *Writing Scientific Research Articles*, 2nd ed. Wiley-Blackwell
- Rebecca Moore Howard, *Writing Matters: A Handbook for Writing and Research*, McGraw Hill
- *MLA Handbook*, 8th /9th edition

Websites:

https://owl.purdue.edu/owl/purdue_owl.html

https://library.leeds.ac.uk/info/14011/writing/106/academic_writing