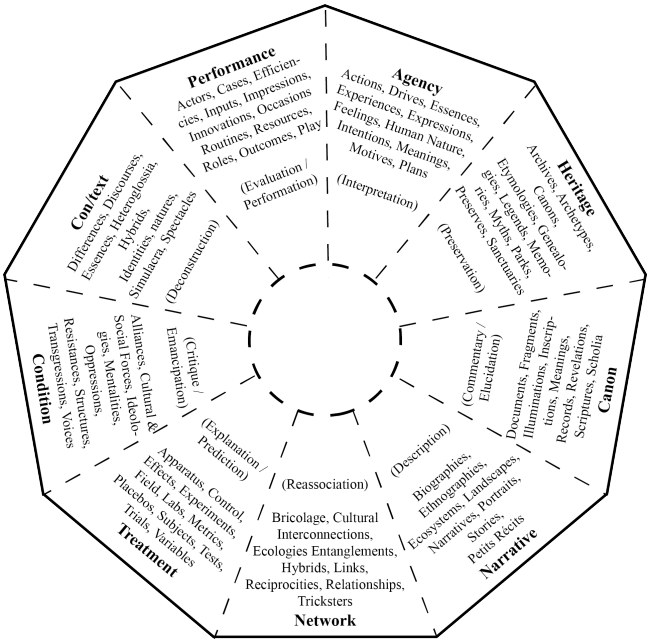
The Principles of Research (as Rhetoric)

DRAFT



Stephen Petrina
University of British Columbia
Department of Curriculum and Pedagogy
2125 Main Mall
Vancouver, BC V6T 1Z4
Canada

Phone: 604-822-5325 Fax: 604-822-4714

stephen.petrina@ubc.ca

The author gratefully acknowledges comments by students in doctoral seminars at the University of British Columbia

The Principles of Research (as Rhetoric)

"In the temple of science are many mansions," Albert Einstein declared in his 1918 address to the Physical Society in Berlin. He explained that the "Principles of Research," included "supreme purity, clarity, and certainty at the cost of completeness;" "inexhaustible patience and perseverance;" or indeed, "the state of mind which enables a man to do [research] is akin to that of the religious worshiper or the lover." Einstein was already a celebrity, and was quite influential in convincing politicians, such as American President Calvin Coolidge, on the merits of research as science. "Not many of us are endowed with the mental equipment that can employ the scientific method in seeking for the truth," Coolidge pronounced to a group of researchers in 1924, "but we have advanced so far that we do not fear the results of that process." At that time, certain fields queued up for admission into the temple of science. A hopeful entrance was through what George Arps, the Dean of the College of Education at The Ohio State University, identified in 1922 designated as a "further reduction… to the more rigid methods of precision and of bringing scattered, undifferentiated items of its field under laws and principles."[i] These were heady days when research *was* science, representing the torch of the Enlightenment, harnessed for progress, illuminating a path of destiny and liberty through dark, unfamiliar territory (Figure 1). But nowadays, the temple of science is spoiled, and the specter of Marx haunts the social science wing while the ghosts of environmental cataclysm, holocaust and military might haunt the physical science wing.

Figure 1. "Welcome Wizards!" W. A. Roners' illustration in the 30 December 1924 issue of *The Washington Post* (p. 6). Copyright expired.

Research is no longer science, a search (for truth) through dark, uncharted territory. And supreme purity, clarity, certainty, inexhaustible patience and perseverance hardly describe principles that guide research. The paradigmatic metaphors for research are no longer believable, persuasive or tenable and, in a way, are exhausted. Yet the conflation of research with science was always questionable. On one hand, scientists were uneasy with the popularization of research. As one scientist wrote in 1959, "*research* is the latest discovery of the word hucksters, and already this venerable and useful term is being sucked dry" (Nason quoted in Wolfle, 1959, p. 1163). Once the temple of science could no longer consecrate the practices or practitioners within, fictions were nearly impossible to maintain. On the other hand, researchers in the 1903s, especially critical theorists, questioned the politics and pragmatics of a strict association with science. Deconstruction nonetheless takes credit for contradicting, eroding and toppling the definitions, foundations and principles of research. No matter, in the

wake of all of this, research is rhetoric. Or at least rhetoric is what we do when we realize and represent— document, portray, read, write, understand— and act on research. This is not to reduce rhetoric to its pejorative connotation, but rather to join in raising rhetoric to its role in democratic or inter/disciplinary persuasion.

If we take research as rhetoric to express a first principle, then we can entertain additional principles that follow. You may protest that poststructuralism did away with first principles and, in effect, any principles that may follow. Or you may suggest that principles are a relic of modernism and cannot hold under postmodern conditions. But surely you do not object to that ancient tool of philosophy, the thought experiment? For a pedagogical moment, let us imagine that there are ten principles of research. Let us presuppose that the tale of rhetoric is wagging the postmodern dog(gy style) of research.

1. Research Orientations

First Principle: Research is as much a literary as a methodological challenge. Or if you like: Research is as rhetorical as it is epistemological.

In *The Postmodern Condition*, Lyotard (1984, p. 41) begins a section on research and its legitimation by noting that the "essential mechanisms" of research "are presently undergoing two important changes: a multiplication in methods of argumentation and a rising complexity level in the process of establishing proof." With this proliferation of rhetoric accompanied by a proliferation of methods, researcher s and students of research face a nearly overwhelming palette of choices. Generally speaking, paradigm wars erupted over the anxieties generated by these choices. Methodologists or theorists refereed confrontations between genre snobs and narrated the wars by defining the rules for in/commensurability. How can one "do" agency and structure at the same time? How do we attend to the particularities of everyday life while

attending to the world and seeing it whole? How do we write what Lyotard (p. 60) called our petits récits while still authoring *some* grand narratives? How do we discursively represent our differences while explaining our commonalties? Are methods of interpretation commensurable with those of prediction? This first principle suggests that writing and re/presentation are as important as methodologies in research. One challenge is to situate data in various frames of reference, through a series of translations and transformations. A challenge from the other direction is to ground these various frames in data.

Mixed methods research and bricolage emerged as ways of negotiating the palette of choices…

All research is simultaneously empirical and rhetorical; or, all observed, translated, transcribed or reported (i.e., constructed) data are empirical and rhetorical at the same time. Research is primarily about persuasion— no one but naive realists really believes anymore that research is about mirroring or parroting ontological reality. In other words, the deal is not really about how knowledge is constructed, but about what is done with it. This is the role of theory in research (see Second Principle).

Now, this does not mean that one cannot attempt to persuade others that in fact this or that research has verisimilitude or is an accurate portrayal of ontological reality (assuming we are ontological realists as opposed to relativists). Think of global warming here— it is a great example of scientists trying to persuade other scientists, citizens trying to persuade politicians, politicians trying to persuade citizens, and so on. Both the science and the action are dependent on rhetoric— there is no fact that is convincing, and no convincing fact that cannot be countered with an alternative fact. And, so the devices of research AND rhetoric are being honed and honed, together.

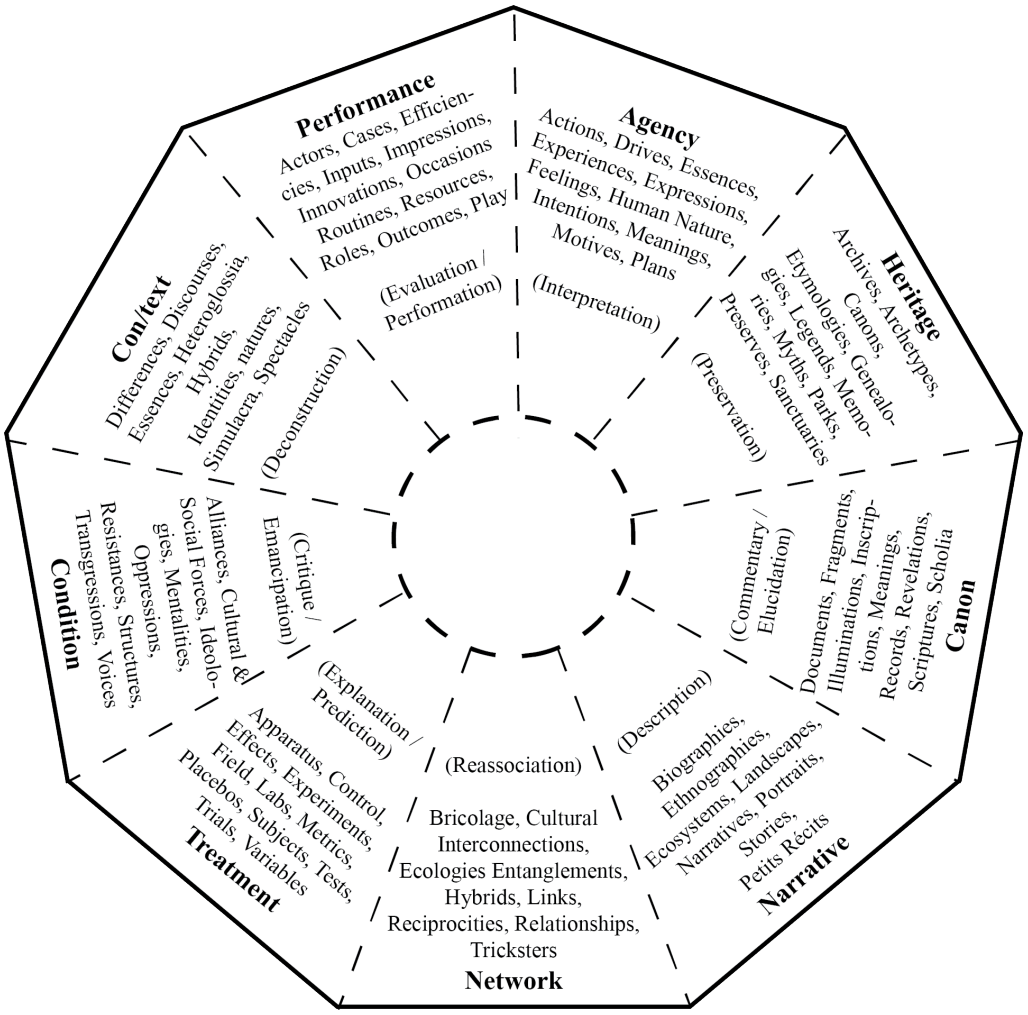


Figure 2. Research genres or discourses.

2. Data, Ethics, Method(s), Theory & Site(s)

Second Principle: Researchers see, and basically find, what they look for.

However simple this truism may be, there is something profound here. This is not to say that researchers will not see or find the unexpected. Rather, this principle addresses the role or purpose of theory in research. What researchers "see" when they peer into classrooms, cyberspace, homes, lakes, offices, or any cultures and ecologies for that matter, are liberated or constrained by what they "look" for. What we gain in analytical purchase through theory, we

may have to give up in narrative. Or are agency, con/text, narrative, and structure more literary than methodological problems (see First Principle)?

Third Principle: Identity determines, forms, or shapes observation and representation (of data) but observation and representation (of data) determine, form, or shape identity.

This may appear as a paradox but it also suggests that identity (of a researcher) along with data are interdependent, distributed and malleable. But there is also something durable about identities and data. This is a principle of standpoint epistemology, subjectivity or positionality. The researcher's identity, standpoint, subjectivity or positionality— their ethics and ontologies— matter. Researchers' identities are partially constituted by ability, class, gender, race, and sexuality, which matter. This principle also suggests that there is no such thing as a neutral or objective observer; hence, there is no such thing as a neutral or objective observation (see Second Principle).

Fourth Principle: Data, ethics, participants-subjects, researchers, methods, theories, and sites (settings) are interdependent.

This is a logical outcome of the Second and Third Principles, which suggest that the various aspects of research do not stand in isolation to each other. Data make sense only in relation to methods, theories and sites (and relative to participants-subjects' and researchers' identities or ethics). Methods and theories determine, form, or shape, data and sites (and relative participants-subjects and researchers). Data and sites ground, form, and locate theories and methods (and relative to participants-subjects' and researchers' identities or ethics).

Fifth Principle: Ethics are not fully expressed in the regulation of ethics.

There is more to ethics than the institutional regulation of ethics (see Fourth Principle). Privilege, power and duty or responsibility go hand in hand. Moral obligation means that we adopt the principles of three golden rules: 1) Do not do unto others what you would not have done to you (Principle of Malfeasance). 2) Do unto others as you would that others do unto you (Principle of Beneficence). 3) Weigh actions by what is fair (Principle of Justice). These are summarized as "do no harm," "try to create good," and "be fair." Locate your ethics within possibilities, as indicated in Table 1.

Table 1. Systems of ethics and practice (Adapted from Flinders, 1993).

Ethics / Practice	**Utilitarian**	**Deontological**	**Relational**	**Ecological**
Recruitment	Informed Consent	Reciprocity	Collaboration	Cultural Sensitivity
Fieldwork	Avoidance of Harm	Avoidance of Wrong	Avoidance of Imposition	Avoidance of Detachment
Reporting	Confidentiality	Fairness	Confirmation	Responsive Communication
Justification	Validity	Confirmability	Resonance	Authenticity

3. Ontology, Epistemology & Knowledge/Power

Sixth Principle: (Research) knowledge is contingent, but not necessarily on (social) reality.

This is a statement on epistemological and methodological relativism as well as ontological realism. Epistemological relativism and pluralism suggest that there are different ways of knowing the same thing. Methodological relativism suggests that knowledge yielded from research is dependent on the methodologies deployed. Ontological realism refers to the existence of an independent or preexisting reality. Ontological realists admit the preexistence of

an unknown world but reject the preexistence of a research (scientifically) delimited or prescribed world. This suggests that our (research) knowledge is both malleable and durable, but *not* a mirror of reality. Hence, we have to choose and negotiate the knowledge— types of inferences, conclusions, recommendations and truth(s)— that ought to be drawn from our findings (see Fifth Principle).

Seventh Principle: Research re/produces Knowledge/Power.

The cliché that says 'knowledge is power' is exactly that: a trite cliché. Of course knowledge is power— they are one and the same. Foucault introduced the expression knowledge/power to overcome our separation of the two, but as Latour (1999, p. 262) noted, the slash is unnecessary. Knowledge (reason) and power, whether power (force *a la* discipline or hegemony), have effects. Knowledge (reason) and power (force) are by necessity aligned with politics— knowledge/power is not neutral. The question is whether politics— representations and negotiations of interests— can be used to arbitrate in knowledge/power decisions. This is to say that researchers must understand that what they do and find have intended as well as unintended consequences. This also suggests that the researchers' politics (interests) are part and parcel of research knowledge. Toward who and what are your responsibilities (see Third, Fifth and Sixth Principles)?

Eighth Principle: Nature and the world— including research participants— are neither quick nor anxious to give up their secrets.

After centuries of colonization, domination, oppression, and ecological degradation in the name of research (and development), why would anyone or anything be quick or anxious to give

up secrets? In fact, research participants will fabricate secrets for researchers to satisfy their own powers of resistance to forms of research. Frustrated with one thing or another, researchers themselves have also fabricated data. Does this mean that we ought to be skeptical of what our participants and data tell us? Or does it mean that we get the data we asked for or deserve (see Second Principle)? Arrogance is not so easily checked at the door, but does this mean we cannot approach research and participants with a sense of gratitude, humility and patience?

4. Academic Freedom, Funding and Intellectual Property

Ninth Principle: Funds and sponsors (are likely to) determine research direction and knowledge/power, leading to an erosion of academic freedom.

Public and private research policies and sponsors actively shape and determine research data, methods, theories and sites (as well as participants-subjects' and researchers' identities or ethics) (see Fourth and Fifth Principles). More often than not in current competitive research contexts, strings are tied to purses. As David Noble and Nancy Pfund warned, with trends in research support, "there is relatively less freedom for the researcher because there is now a single line to follow, the line of the generous benefactor. And this brings us back to the gravest concern of all, the future of academic freedom." Some research contracts will prohibit the communication of (certain) findings, or claim ownership over all forms of intellectual property rights associated with the research. Other contracts will place a temporal moratorium on communicating or distributing research results while muzzling or censoring the researchers. In this marketplace of research, it has become imperative that researchers make themselves aware of the implications of their research funds and sponsors for academic freedom and IP. The

public interest dictates that researchers place their research participants, academic freedom and freedom of speech ahead of private gain.

Tenth Principle: Ownership over data and research results is becoming less certain.

Unless a contract has been signed, formal agreements made, or unless institutional policies dictate otherwise, researchers retain the copyrights to their research notes and reports. Some forms of data also immediately attain copyrights while other forms do not. Ownership of data is complex. For example, who owns the intellectual property rights to a transcribed interview script or an oral history audio or video? Is it the researcher, who recorded the interview? Is it the participant or community, who produced the data? Or are these data jointly owned? Or is it the sponsor of the research? Universities are increasingly interested in copyrights and how to capitalize on research conducted through the use of infrastructure and other forms of support.

References

Einstein, A. (1918). *Principles of research*. Address given to the Physical Society, Berlin Germany.

Flinders, D. J. (1992). In search of ethical guidance: Constructing a basis for dialogue. *Qualitative Studies in Education, 5*(2), 101-115.

Good, C. V. (1972). *Essentials of educational research*. New York: Meredith Corporation.

Latour, B. (1999). *Pandora's Hope: Essays on the Reality of Science Studies* (Cambridge: Harvard University Press).

Noble, D. & Pfund, N. (1983).

Research Methods For Communication Science (Chap 13)

Wolfle, D. (1959). Taxonomy of research. *Science*, October 30, 1163.

---

i George F. Arps, "Report of the College of Education for the year ending June 30, 1922" in *52nd Annual Report of The Board of Trustees of The Ohio State University For the Year Ending June 30, 1922* (Columbus: OSU, 1922), 112-113.