

Three rules for leading a paper discussion

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Silence is the sound of a seminar no one is steering, and for my first years as a professor, I was the one who should have been steering it. The course was a graduate seminar in quantitative ecology; the papers were good, and so were the students. Left to itself, though, the room reached for criticism, because criticism is what sophisticated scholars are supposed to do, and the gaps between objections filled with silence. That was not a failing in the students. It was a vacuum where leadership should have been. I had given them nothing to push against.

A research article, like any piece of writing, is an open text (Eco 1989), and the ways to engage it are effectively infinite: trace the papers it descends from, question its methods, line up the alternatives it never considered, etc. A group of readers with different aims and preparation will not converge on its own. It needs someone to set the terms, carry the conversation from one idea to the next, and above all, make the hour an occasion of learning. A discussion is not something you start and step back from. It is something you lead.

Working that out led me to what I now call *appreciative reading*, and to three rules for leading a discussion that I wrote down in the autumn of 2011 and have used ever since.

Rule one: start with a summary

The commonest mistake in leading a paper discussion is not a wrong first step but no step at all. A discussion needs a direction: a springboard, or a claim to argue against. You can be sure it will go badly when the leader's first remark, and often the only one, is this: "So, what did you think?" Begin instead with a summary. I aim for four sentences: the central finding, the method that produced it, the claim the authors build on it, and why any of it matters.

The summary can be brief, but it has to be declarative, not interrogative. It establishes the leader's control, fixing the vocabulary, the definitions, and the bounds of the investigation. It also brings in those who have not read the paper or have not read it closely. (Call them the *skimmers*; in any real seminar there are a few.) Leave them out and the discussion loses participants just as it gets going: fewer perspectives, more room for one loud opinion to run away with the hour. Brought in early, the same people become allies: anyone who takes

an interesting position, agreeing or not, serves the leader's goal. The summary is the opening gambit, and one of the leader's most useful devices.

Rule two: plan for the life cycle of the discussion

A discussion has a life cycle, and the leader should plan for it. What a group reaches together can be more complete and less prejudiced than what any member reaches alone, the ideas raised, questioned, and assembled into something better than their parts (Mercier and Sperber 2011). None of it happens on its own.

Planning means preparing for the phases the discussion will pass through. The first is *ignition*: getting from the summary to the point where the group generates ideas without you. At the start, the questions that do this are closed ones. A closed question has a determinate answer, so that understanding it is a test of comprehension, and an answer that is not obvious, so that it cannot be guessed. What was the treatment group? How large was the main effect? These confirm a shared baseline before anyone interprets, and they are harder to write than they look, which is why I prepare them rather than improvise.

Momentum comes from a different kind of question. Once comprehension is established, the leader turns to open ones. Which assumption carries the most weight, and does it hold outside the data? What other design could have answered the question, and what would it have cost? Open questions surface analysis rather than recall (Crowe et al. 2008), and they set off the chain reaction. They serve just as well at the end of a topic as at the start: a well-aimed question can retire the discussion-hogger who speaks mainly to be heard, and redirect the topic-hijacker for whom all roads lead to Rome, without anyone feeling shut down.

Regulation runs on a device: some visible structure that holds the conversation in place, a rubric, a diagram, or a table on the whiteboard. It sets the scope by demonstration rather than decree, shows whether a comment is on topic, and gives the leader an anchor when talk drifts. The one I use most has four columns: what the authors found, how they interpreted it, what the group makes of it, and how strong the evidence is. Filled in column by column, it keeps the discussion moving instead of leaping to a verdict, and it maps onto the three

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reading questions below. A two-column scope map, marking where a claim holds and where it fails, is another form. Whatever its form, I no longer start a discussion without one.

It also needs an exit: end on a deliberate cue, a last question, or a round of one-sentence takeaways, so the discussion does not fade. A clean close is part of the learning.

Rule three: ensure that disagreement is well-founded

The last mistake, after failing to summarize and failing to plan, is to confuse criticism with disagreement. It is a beginner's error, because unexamined disagreement is easy, and a more careful reader will expose it at once. It is silly to question a statistical result before weighing the study's design, obtuse to object to a model's assumptions before asking what the model is for. Disagreement at the outset is often an excuse not to engage: if a paper can be dismissed from the start, no one needs to do the hard work of reading it closely, and everyone is free to leave their mind at the door. A good leader does not allow this and does not tolerate bullshit, posturing, or their usual disguise, imprecise vagueness. Disagreement has to be earned.

This is where appreciative reading earns its place, because being critical is not the same as being negative. I give my students three questions for reading a paper, and they work just as well for running a discussion. The trick is not to move on until the present one can be answered out loud.

The first question is this: What did the authors find? It asks about what was reported, and it should be answered with reference to measurements and observations, with as little theory as possible, especially when the study itself is a test of theory. Subjects in group A were several times more likely to show the outcome than those in group B. Most findings are not that tidy, but the aim is the same, however sophisticated the analysis: to stand where the original investigators stood, looking at their data, and say what they saw.

The second question is this: How did the authors interpret it? Here, the student may want to skip ahead to their own reading, and that is premature for two reasons. The first is that the authors have thought about the meaning of these results longer and harder than anyone else in the room. They have egos and agendas, and once in a while a strange interpretation, but that is the exception; much more often

their reading is more incisive than any first-timer can match, and the paper has passed peer review besides. A reader who sets themselves above authors, reviewers, and editors all at once is bold indeed. The second reason is that you cannot responsibly hold a different opinion until you can say what it differs from. Reasons to disagree presuppose an account of the disagreement, and that presupposes understanding the authors' view as they understood it. They wrote first, in ignorance of your objections, so the work of stating the difference falls to you.

Only now comes the third question: What do you think it means? A full answer touches on scope (widen the claim or narrow it?), credibility (do I believe the results?), assumptions (were they acceptable, given what the study was for?), competence (were the measurements and analyses sound?), and alternatives (could something else account for the pattern?). Many of those judgments are pragmatic rather than absolute. Whether an assumption is acceptable usually depends on the use to which it was put, which is why the second question precedes the third. The first two questions are appreciative reading. The third is where criticism belongs, and by the time you reach it, the criticism has something to stand on.

Before the next discussion you lead, carry in three things: a four-sentence summary, a few questions worth asking, and one device to keep the talk honest. In good discussion, as in genius, there is only the smallest fraction of inspiration. The rest is work.

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Conflict of interest

The authors declare no conflicts of interest.

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