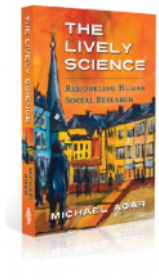
The Lively Science. Remodeling Human Social Research
Michael Agar, 2013
Minneapolis: Mill City Press
http://www.thelivelyscience.com/



I love this book. I do. It offers a tight case for researching the human social world in a way that I hold dear. “All sciences”, Agar writes, “make their case based on evidence according to the rule of some logic, and then they try to prove the case is wrong in order to show that it might be right” (p. x). The lively science Agar proposes is not different from this, but “once a human makes other humans in their social world the scientific focus, all sorts of problems come up that didn’t appear with material objects or with most non-human forms of life” (p. x). These are problems that many researchers come across and that Agar describes and addresses in his must-read book.

In our [campus]OrléoN philosophy learning to become a (better) researcher is captured in a reminder of five questions:

1. what is available for you?
2. what do you want to achieve?
3. what can you do?
4. what do you do?
5. who are you?

These questions are, I think, good guidelines for reflections, an activity every researcher should undertake every now and then to see if anything needs reconsideration.
I will not repeat here all the points Agar makes – you should indulge yourself with a copy of your own and sit back for an pleasant read – but I’ll discuss his book answering these questions and show how his work is a valuable asset for researchers of human social worlds.

What is available for the HSR researcher?
As a sensible alternative for science in which humans are researched by hypothesis-testing and experiments as if they were Newtonian objects, Agar posits a lively science in which researcher and researched remain the humans they are. He offers an epistemology, a perspective on the nature of knowledge and how it is acquired, based on several key historical figures. In this epistemology all sorts of data – numbers and propositions and other kinds of information – are available to learn more about a particular human social world. It is not about qualitative versus quantitative data, but about what you do with your data. Behavioral & Social Science (BSS) involves “statistical quantitative hypotheses derived from prior theory” (p. 10). Human Social Research (HSR) is “the more general framework that can include BSS” (p. 11), but that includes other types of research as well. (This distinction raises a puzzle I will put forward at the end of this review).
The first historical figure is John Stuart Mill. Humans, he noted, are good at induction in that they generalize from observations of co-occurring events, but this can lead to errors when they only see the cases that support their generalizations or when they explain away the cases that contradict them. To counter this, Mill invented the Joint Method of Agreement and Difference: “You do everything you can to show what you think is going on might be *wrong*” (p. 26). Once you see an agreement in cases, look for cases that do not fit *and* make problem cases happen. If X and Y are causally related, you should only find cases in which both are either present or absent. In human social worlds, however, finding isolated Xs and Ys is impossible. In fact, “out there in the world a lot of causes are in play and a lot of effects could have been produced by either one of them” (p. 36). Mill thought human social science was ‘gappy’ and that there would always be gaps with uncontrolled variables. Raising the issue about multiple causes and multiple effects, he foreshadowed the sciences of chaos and complexity and their nonlinear dynamic systems. Human social worlds turn out to be nonlinear dynamic systems, because objects of study are also subjects with a mind of their own.
The second historical figure is Franz Brentano. An empirical psychology has to take its data from a first person point of view, said Brentano, and he called the concept to describe this with ‘intentionality’, which “alerts us to how research subjects are making sense out of things in ways that researchers probably don’t suspect is going on” (p. 67). Intentionality regards all subjects involved in the research at hand, and the scientist, a subject as well, is “a legitimate part of the data” (p. 68). Intentionality is the object of consciousness, the mental reference to a context that in its bond with the world lets us

behave according to our beliefs, desires, emotions and purposes. We do not act because something causes us to do so, but because we want do "*something with reference to some outcome*" (p. 74). The third historical figure Agar puts on stage is Wilhelm Dilthey. His accomplishment was that he put actual human life into human social science and gave humans history, which means that their intentionalities develop and change over time. His focus was on lived experiences (*Erlebnissen*) and how they are part of a larger lived experience pattern:

> "A point of view, at any particular moment, consists of an intentional stance in some lived experience context. An individual's intentionality is shaped by biography and circumstances, in a world of limits set by culture and society and political economy and environment" (p. 90).

This makes any particular moment a complicated moment, but not necessarily a unique one. All humans have lived experience and so do their social and cultural worlds. Biography and history influence each other. Individuals are points of intersections of different personal and sociocultural histories: "lived experience and intentionality take their shape and change along a continuum of time, sometimes in surprising ways, the past and the future always a part of the configuration of the present" (p. 97). As in nonlinear dynamic systems, lived experience (of the person and of the larger pattern) is a path that can have different outcomes, but not all of them are probable within the limits set by the natural/physical and sociocultural environment.
Agar constructs a sound epistemology that makes the human social world available for research by humans. True, other possibly relevant founding figures remain unmentioned, as he notes himself as well. But to me the figures Agar discusses suffice for a consistent frame that opens the door to complex social worlds – and really, is there any social world of a different kind?

What does the HSR researcher want to achieve?
The goal of HSR is to describe and explain human social life taking into account "the beliefs and desires and feelings and purposes of [research subjects and researchers], where that intentionality came from, and how it shapes the experiences that they have" (p. 77). Pattern discovery is the heart of HSR:

> "It has everything to do with figuring out what X and Y, and several other interacting things, have to do with each other. Finding patterns is a way to fill in those 'gaps' in 'gappy' human social science and remain true to the 'real' world. […] Without the pattern, you don't know which parts interact, and without the interaction, you don't know what matters in the pattern" (p. 46).

A pattern is contingent as all sorts of interacting events over time have to take place and link up into feedback loops for it to emerge. Yet, once a pattern is detected, "We can *predict a space of possibilities*, and we can show how if you were at one point in that space you can make a good guess about the next nearby point and react accordingly" (p. 52). But what you set out to describe and explain will not be "linked in a direct way to a single powerful, dramatic and obvious cause" (p. 55), and even if a cause is clear, many other parts of a pattern can be in play as well. Human social worlds include causes, but patterns involve more. Complexity and chaos help us to understand patterns as "the pieces plus the nonlinear dynamic of them" (p. 56). HSR does more than just discover these patterns, it discovers how they move and change over time. The way a pattern develops, is called the path. Several paths are possible, but not all. There is path dependency, as paths will be limited by a bounded space:

> "Unless the system blows up or dies off or changes in some revolutionary way, a researcher can describe several paths, and he can use those paths to get an idea of the space that limits them, and then try and figure out what the boundaries of that space are and why they are there" (p. 58).

Prediction then becomes "a description of the limits of the space within which different paths can occur" (p. 59). Different, but not all paths can occur and which path will, depends on what happens between time T and the future.

What can the HSR researcher do?
In real life, there are no isolated Xs and Ys on which you can apply Mill's joint method. The reality of human social worlds as nonlinear dynamic systems, that is, full of countless variables that interact in countless ways, challenges us to take our research out of the lab if we want to learn anything about

them. Although the real social world is not a lab, it is not random either. Agar offers a toolkit for "an alternative to the laboratory" (p. 112) with which you can do science on human social realities. The basic idea is "that any science requires evidence organized according to some logic with systematic attempts to falsify the conclusions" (p. 112). For a model for logic, Agar uses the theory of argumentation as laid out by Toulmin. In this model, you make a claim and try to support it with grounds. You tie the claim and the grounds together with warrants, that assure the relevance of the latter for the first and, if necessary, you justify the warrants with backings. The claim has a qualifier that signals how sure you are about the claim. And finally, you offer a rebuttal with which you can consider counter-arguments. In HSR, you can use this model in a nonlinear way, as it represents what you have to come up with in the end. It is not a step-by-step recipe to follow, but rather "a guide to improvisation" (p. 120) with claims, grounds, warrants et cetera changing as the research moves along and you learn more about the human social world that you study: "you *adapt* your own intentionality to a different lived experience in order to figure something out" (p. 121). HSR is path dependent, because you learn after your research is underway. Toulmin's model helps you to organize what you learn.
The core logic in this model is *If-Then* or P → Q. The devil is in the →, the warrant. Why should we believe it is true? After all, "real-life warrants and backings aren't just abstract arrows shot through a logical vacuum. They grow out of intentionality and lived experience, just like the grounds and claims do" (p. 135). Your learning changes your research while you are doing it and the *If-Then* logic will have to handle the learning and surprises that come up. The logic has to be nonmonotonic and allow that "conclusions can change as more is learned" (p. 136). In other words, the logic has to be path dependent too, so you can not only accept or rebut P → Q, but change the proposition all together. One of the logics that allows for this is abduction, created by Peirce. In HSR, Q is an unexpected example of lived experience that you have to figure out from P, a first person point of view. But "researcher and researched lived experience and intentionality are *never identical*" (p. 144). How to translate one into another? How to find differences? Abduction is "a *creative reaction to a surprise*" (p. 144). You observe surprising fact Q, look for a P that renders Q logical and accept P as true as it is a reason for Q. Then you move on to Mills' Joint Method of Agreement and Difference to substantiate your claim.

What does the HSR researcher do?
In order to describe and explain humans in their social worlds, you have to describe and explain their and your own intentionality in a scientific way. For this, the HSR researcher makes up a rational reconstruction of what happened. 'Rational' refers to the scientific mode of evidence-logic-falsification that includes the self-consciousness of the researcher. Again, following Mill, "Expect to be wrong and treat the negative results as an opportunity to learn" (p. 61). One way of testing is asking 'what-if' questions, another is to try out the model with the subjects themselves.
The same words will have different meanings depending on the contexts in which they are used. The reconstruction is not a model of what a person actually thinks, but it

> "shows an outsider how to understand who the research subjects are and what they are doing. It helps outsiders make sense of things. It is more a *translation* between subject first person view and audience third person view than anything else" (p. 80).

Who is the HSR researcher?
The readers Agar has in mind are "the growing number of non-researchers engaged with the human social world who want better ways of understanding how it works" (p. 112). (I'm not sure why a non-researcher would want to engage with this world in a scientific way.) He explicitly advises PhD candidates from Behavioral & Social Sciences (BSS) against HRS. In his days as a professor at the University of Maryland, he learned to say no to their requests for help: "The HSR way will bring madness and possible career deaths to vulnerable BSS grad students. […] Writing a dissertation is as much, if not more, a political act as it is a scholarly one" (p. 63). I agree with his observation when I look at mainstream faculty in the Netherlands. It will be here and now, as much as it was then and there in Maryland, difficult to make a case for HSR. However, in the Netherlands there are also external PhD candidates. These are the inquiring professionals or entrepreneurs or otherwise engaged citizens with the ambition to rethink their experiences in human social worlds in a scientific way. Because they do not have a formal contract with a university, their supervisors might cut them some intellectual slack. Still, even these PhD candidates will have to bring some negotiation skills to the table. Agar's book provides them with the epistemological arguments.

I think there is also an implied reader. The HSR researcher Agar has in mind, is interested in learning about the human social world, but more *à l'improviste* than with clear-cut learning goals, and yet in a systematic way. When humans research other humans, different lived experiences, intentionalities and point of views will overlap or be different. This results in two questions. The first is, whose intentionality gets to say what and why? In other words, "What part of the conclusion in *real*?" (p. 100). Agar's answer is 'scientific intersubjectivity'. This implies self-reference "because the researcher becomes part of the research, and, more confounding yet, the research itself is an example of a human world that happens when a human social world is being researched" (p. 125). This is not an effect to be eliminated, it is a fact of research life. You, as a researcher, will probably come up with different conclusions than Agar or me were we to research the same human social world, but we all have to provide evidence, explain logic and try to prove ourselves wrong: "More than one conclusion is possible, but not all conclusions are acceptable" (p. 126-127). This is not a problem, says Agar, but an opportunity to learn. The second question is how the knowledge that a human constructs corresponds to reality. Here Agar again draws from Dilthey, who said that reality is felt as a resistance to the will. When the purpose part of our intentionality doesn't work, we meet the limits

> "that the world sets on the action we take. We either have to *adapt* to those limits or *change* them, but we can't ignore them if we want to realize our intentions. If those limits, that resistance to human will, hold up for *any* human doing *anything anywhere* at *any time*, we've found reality in a human universal sense of the term" (p. 104-105).

The element of surprise and the unexpected implies you can never tell up front what the outcome of your research will look like.
This brings me to a second characteristic of the implied reader. With your research you might just show how patterns differ between local identities within one and the same organizational context, differences that can be unknown to the identities themselves: "Issues of hierarchy and of emotionally loaded habits, get in the way of seeing and saying the obvious, particularly when the obvious isn't visible within the [local identity's] point of view of those who control the money and write the rules" (p. 95). Your rational reconstruction also reveals their intentionality and lived experience and their vested interests in them. I recognize this from my own research about innovation programs in education, poverty reduction, soil sanitation, urban renewal et cetera. Agar's experience, as is mine, is that results can be either accepted by a funder/authority who is happy to learn from them, and ignored or denied by one who is not. There is, because human social science is a human social real world, "pressure to *adapt*, to shape a project to make sense to the human actors who support it, do it, participate it, and consume it" (o. p. 215). How to navigate this ambiguous territory with professional integrity and product quality has to be a central part of the science and the research training, and so of the HSR researcher.

And finally, I am an HRS researcher. First of all, because I feel very lively and am happy to bring myself into my research projects. In my experience, detecting a pattern is the most exhilarating part of the research. In the beginning there is a mess and everything seems arbitrary. Then I start to analyze the mess and up comes an ordering principle, a pattern, that helps me make sense of what is going on. In my own field, narrative sociology, I call the rational reconstruction a 'jointly told tale'. It helps me to display the common logic in fuzzy communities such as urban neighborhoods, organizations and professions. With Agar's epistemology, I too have enriched my arguments and vocabulary. Paradoxically, a high degree of recognition also made me aware of authors I missed in the book. But then again, this brought about new translations. And isn't that what learning is about?

Floor: So, Mike, here it is, my review of your book. Your book is so much richer in argumentation and I had to leave out a lot. Yet, as I wrote earlier, I'm enthusiastic about it and I hope it conveys my appreciation. In a way, this review is my translation of what I took out of it as helpful for readers. It's possible that they raise their eyebrows and have questions that you answer in your book. My advice to them is to read *The lively science* as well and I hope this review has raised the appetite to do so, then they can judge for themselves if the raised eyebrow was justified.

I conclude with a puzzle I put forward as a question. If HSR is the more general framework that includes BSS as well, then how can BSS and HSR be so different on ten decisive points? And if, as you wrote on page 18, HSR will never do something BSS-sy as "resemble a carefully scripted step-by-

step laboratory experiment", how can HSR exclude aspects of the BSS it includes? I also wonder about the subtitle, 'Remodeling Human Social Research'. Why would you want to remodel the HSR that your book is about? Or have I got the acronyms mixed up?

Mike's reply: You asked me to write a brief response to your review of *The Lively Science*, to pick an issue that might start a conversation with other members of [campus]OrléoN. One issue you wondered about, with good reason, is the separation in the book between two kinds of human social science, behavioral-social science, called "BSS," with tongue in cheek because of the "BS," the tradition that dominates today, and "HSR," human social research, the tradition that the book traces back to Brentano and Dilthey, among many others who weren't discussed.

The main thing I wanted to convey was this: Any science has to engage with its phenomenon in its "natural" state and return to that state to test its conclusions. Human social science--the general term used in the book--takes as its "natural" phenomenon humans in their social worlds. So, following the same logic, research questions must rise from and conclusions must eventually return to that world. In other words, a human social science must learn subject intentionality and lived experience as it takes shape dynamically in a particular historical moment. Otherwise, as I wrote several times in the book, what is the science about?

Most modern human social science fails this test. This is a strong argument that, if a research project doesn't begin and end with an HSR approach to human subject worlds, neither its truth nor its usefulness can be evaluated. The argument is the opposite of what I've often encountered in applied projects, namely, the superficial idea that by tacking on a few researcher-controlled focus groups, the intentionality and lived experience of research subjects can be adequately described.

At the same time, the argument in *The Lively Science* doesn't rule out a quantitative experimental design as part of a research project--perhaps even a "natural experiment." The book offers two ways to think about this. The first way: The book describes a "logical trifecta," how an abducted proposition can be tested inductively and deductively in the course of a project. Or consider the growing HSR use of games to test asserted BSS results against specifics of intentionality and lived experience in an HSR context, for example how social identities and relational histories among players in a particular human social world show results that differ from BSS laboratory based conclusions.

A second way is a test of the human universals that are critical to make human social science possible at all. A proposition held to be universally true for all humans is ripe for a controlled BSS type approach. I used Milgram's obedience research as the example in the book. There are many others, like the "theory of mind" experiments that show the universal development of abilities that, by the way, also make it possible for a human researcher to model the intentionality and lived experience of other humans.

There are other links. I've always used available aggregate data to better characterize my HSR sample, for instance. But I'm running out of space here. At the beginning of the book I talked about how I was separating BSS and HSR epistemologies as a rhetorical strategy but that as the book went on a "conversation" between the two would develop. The nature of that "conversation" needs more work. I think the confusion resulted from my rejection of BSS as the dominant epistemology but my acceptance of that tradition as a potentially useful method in a larger HSR context. The point is that human social science isn't fundamentally about data or methods. It's about epistemology. BSS might offer some useful methods as part of a human social science project, but as an epistemology, so the book argues, it is a 200 year old mistake.

There are many other issues that you raise that merit discussion, but I'll stop here and thank you again for that helpful review.