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A Realist Approach, Research Design and Engagement in Supporting Researchers

Joseph Maxwell in Conversation With Mechthild Kiegelmann

Key words: qualitative research; teaching; research design; realism; mixed methods; validity; generalization **Abstract**: In conversation with Mechthild KIEGELMANN, Joseph MAXWELL talked about his academic pathway. MAXWELL mentioned biographical phases such as being lost in the field as a young scholar of anthropology, working as a researcher in medical education, teaching at Harvard or getting tenure at George Mason University where he worked for 20 years. He introduced key milestones of his work: his design model, realist approach or validity in qualitative research and generalization. MAXWELL talked about important colleagues and commented on overcome divides between quantitative and qualitative positions. Readers get a glance of his passion about philosophy. His humility and commitment to teaching shone through.

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About the Interview

Joseph MAXWELL was the keynote speaker at the meeting of the international Center for Qualitative Psychology in Karlsruhe, Germany in 2018 (MÜLLER & KIEGELMANN, 2020). In addition to his talk, he participated in the conference program called "dissertation consulting," i.e., discussed with doctoral students about their projects. There, his attentive listening to junior researchers as well as thoughtful, constructive feedback and comments to dissertation projects were impressive. Following the conference, I asked Joseph MAXWELL if he would engage in an interview for the Journal *FQS*. He agreed and we scheduled an online video interview at the end of 2018. After a student from the Karlsruhe University of Education transcribed the text, I started the editing. Joseph MAXWELL read over the transcript and we both made minor corrections for better understanding. After submitting the interview to *FQS* some revisions (e.g., including reference) were made. The usual academic business, as well as the additional workload due to the COVID-19 pandemic, delayed the preparation of the manuscript. Joseph MAXWELL approved the final text in April 2023. [1]

1. Academic Background

Mechthild KIEGELMANN: The purpose of the interview is to introduce yourself and your ideas to the readers of this journal. My first question is an invitation to just introduce yourself, please tell me about you as a person and how you ended up being a professor for methods in qualitative research.

Joseph MAXWELL: I'm currently an emeritus professor at George Mason University. I'm retired. I'm still doing much of what I did as a professor, writing papers and reviewing for journals; I'm just not getting paid for it anymore. But you asked how I ended up as a professor. [2]

Mechthild KIEGELMANN: Yes. I know you did something in medical research beforehand.

Joseph MAXWELL: It was basically serendipity. I have a PhD in anthropology; my dissertation was an ethnographic study of an Inuit community in Northern Canada. I spent a year doing research in that community. Ethnography is basically qualitative research, although I don't think I'd ever heard the term "qualitative research" at that point. Well, while I was working on my dissertation, I was also looking for a job, and a friend happened to know of an opening for a research assistant in a hospital she worked at. They had just gotten funded for a study of the educational value of peer-review committees for doctors who served on those committees; it was designed as a purely quantitative/experimental study. When I was interviewed for the position, I suggested, wouldn't you want to observe the committee meetings and take notes, and interview the physicians about their experiences? They thought this was a good idea, so I got the job, and spent seven years in that department, basically bringing gualitative research methods to that medical education department. There had been people in the field of educational evaluation who were doing qualitative research, but it was only after I took that job that I discovered that there was something called qualitative research and that I had done it. That study led to a paper that I wrote with two colleagues there, on combining ethnographic and experimental methods. This was before the term "mixed methods" had even been coined. That paper got a certain amount of attention in the education field (MAXWELL, SANDLOW & BASHOOK, 1986). [3]

I spent seven years working in that department, on a bunch of different studies, many of them combining qualitative and quantitative methods. However, I didn't want to spend the rest of my life doing that; I wanted to teach. I was applying for academic jobs, but was having no success at all. One day I was looking at the job listings in the newsletter *Anthropology News*, and I saw a listing for a position for someone to teach qualitative research methods, integrate qualitative and quantitative methods and contribute to educational practice. I thought, "This is perfect." Then I saw that this position was at the Harvard University Graduate School of Education. I thought, "Forget it." I would have no chance of getting the job. I happened to mention this position to a colleague, and he said, "Go ahead and apply, you might actually get the job." So, I did, and I got the job, again more serendipity—I happened to be exactly what they were looking for: they wanted a

real ethnographer, but someone who also did mixed methods research, and I was the only person in the pool who fit that description. I spent 10 years at Harvard, developing courses and writing papers on qualitative research and on combining qualitative and quantitative methods; the term "mixed methods" had been coined by then. But I didn't get tenure at Harvard—hardly anybody gets tenure at Harvard. [4]

Mechthild KIEGELMANN: That is actually when we met and I remember that you were a very engaged teacher. I remember that you were supportive of me, an international student with limited knowledge of English who didn't understand all the rules; you took the time to listen and figured out what actually my questions were. For example, one day I tried to understand networking in the context of large academic congresses. In your office hour, you summed up what I was looking for, "Okay, you need to figure out where to go to a conference." You then turned to your recycling paper basket to give me a call for abstracts for the next AERA conference and said: "Go there." That was wonderful because you were so approachable and you were really listening to whatever we students needed. I think you made a big impact at the school especially in contrast to other people who might not have put as much effort in teaching as you did. It was a very valuable experience for students and the school as a whole, to have someone who really loved teaching. [5]

Joseph MAXWELL: The students were upset about my not getting tenure; but with my publication record, there is no chance that Harvard could ever have given me tenure. However, I did finish a draft of my qualitative research design book (MAXWELL, 2013 [1996]) before I left. I then worked at a nonprofit educational research center for a couple of years, again not feeling that this is what I want to spend the rest of my life doing, but I wasn't having much luck finding a teaching position. Then a colleague who was at George Mason University called me and said that they had just created a position for someone to teach research methods, and she wanted me to apply. So I did, and got the job; the senior associate dean later told me that it was mainly because of my qualitative research design book, which had been published by then. [6]

Mechthild KIEGELMANN: I remember the time when you were writing that book while teaching your course on design. In this course, you were going chapter by chapter and together with us doctoral students, we were trying out the exercises and then you rewrote the book. That was the process, right?

Joseph MAXWELL: Yes, I wrote that book to help students learn to do good qualitative research. More than once, at a professional meeting, I have had a student whom I didn't know come up to me and say, "Your book saved my life." So, to talk about teaching, I've always known that I was different from other people; I talk about this in my book, actually. I never felt like I fit in; so my strategy was not to try to be *like* other people, but to be *helpful* to them. My goal as a teacher has primarily been to help students learn to do good research; that's why I'm still writing papers and reviewing for journals—to be helpful to students and researchers. [7]

Mechthild KIEGELMANN: You were talking about how you ended up at George Mason University; you were there for many years, right?

Joseph MAXWELL: Twenty years. That again was serendipity. I had never taken a course in qualitative research or even in research methods. One of my fellow students at the University of Chicago said that she thought the faculty felt that research methods were too important to teach, that the good students would figure it out and the others could just get thrown on the trash heap. I'm still angry about that. [8]

Mechthild KIEGELMANN: I just want to say that is exactly the opposite of the way you were teaching because you care about the students and help them to learn.

Joseph MAXWELL: My career in graduate school was really unusual. I dropped out of school for three years because I did not know what I was doing. I came back and got really involved in reading philosophy; I wrote a long paper on the concept of mind and the nature of culture; I did a lot of reading in natural science as well. Those eventually led to my book "A Realist Approach for Qualitative Research" (MAXWELL, 2012) and thinking about philosophical realism as a way of understanding how to do research. I talk about my progression in Chapters 9 and 10 on my design book (2013 [1996]). Because I did never take a research methods course, I was able to figure out things on my own; I was not brainwashed by prevailing ideas about what qualitative research or research in general should be. [9]

2. Design Model

Mechthild KIEGELMANN: But you were not the only person who ended up teaching qualitative research methods. It was just being started to be introduced in psychology and in other disciplines. So, it was a new field and you were there in the beginning and also participated in the development of graduate courses for qualitative methods.

Joseph MAXWELL: Well, a lot of people had been doing and teaching qualitative research before I started teaching at Harvard: Michael Quinn PATTON, David FETTERMAN, and so on. Their books were enormously influential (FETTERMAN, 1988; PATTON, 1980). The program evaluation community had been using mixed methods research long before anybody else. So, I used what was out there. In particular, there were a few papers and books that stimulated my thinking about a different way of thinking about research design. That was critical to my future career, developing an alternative way of thinking about design that is based on the everyday meaning of design as the structure or arrangement of different parts of a particular entity, which is different from the usual meaning in research, as a protocol or sequence of steps for doing a research project. [10]

Mechthild KIEGELMANN: Or in my field, in psychology in the 1980s, we learned how to operationalize a hypothesis and the result was considered the design—the beginning and the end of it. You have a much broader view of what design means. Joseph MAXWELL: Yes. That was probably the most important contribution that I've made to research methods in general and qualitative methods in particular. I've applied that design model to mixed method research as well. There I am arguing with almost everybody else in the mixed methods community, who are very much into these typologies of design and this sequential model and so on. Actually, I'm the gadfly of the mixed methods community, because I disagree with almost everybody else. I have written a bunch of papers challenging the conventional wisdom in the field, and also challenging conventional wisdom in qualitative research, and I can talk more about some specific of that if you want. [11]

Mechthild KIEGELMANN: There is one point I just want to double check if I understood you right. One thing is that you read philosophy, you studied and got your PhD in anthropology and then got this job in education, and also worked with the medical people. You are kind of interdisciplinary. You know statistic, quantitative, science approaches and you are trained in the humanities. You are not someone coming from quantitative thinking and say, "Okay, we do a little bit qualitative in addition." Also, you are not someone coming from philosophy and say, "Okay, now we add a little survey with some simple descriptive statistics to our research which is embedded in methods and theories of the humanities." In contrast, you got trained by different traditions and you put this all together. [12]

Joseph MAXWELL: Yes. I once went to a talk about the folklorist Cecil SHARP, who had collected a lot of Appalachian folklore and music, and the speaker called him an intellectual magpie. (A magpie is a bird that collects lots of little shiny things.) I thought, that's me, that's what I do. I just find all these interesting ideas and try to put them together in some way. I never took a course in qualitative research methods, so I wasn't brainwashed by that. I just find things that I can put together in a coherent understanding. [13]

Mechthild KIEGELMANN: Still, you are also not an autodidact outside of the research communities and universities. You are a researcher and a scientist. I think that is important because you are coming from various academic traditions at the same time and not just making it all up.

Joseph MAXWELL: Right. I am not making it up, I am drawing heavily on my reading and research. One example, which is sort of outside of qualitative research, is statistical significance tests. When I was working in the hospital, a colleague told me: "The main thing that I learned from research methods courses is, when you read a scientific paper, you look at the P value, if it's not P<0.05 you throw it out; it's worthless." I knew that was wrong, but it took me years to figure out why it was wrong. I ended up developing a way of using the criticism of statistical significance tests, which is becoming widespread now, but still not having a huge impact on what people are publishing. Many people do not understand what a statistical significance test actually tells you. I won't go into this because it has nothing to do with qualitative research, but it is the kind of magpieish thing that I have done (MAXWELL, 1999). For example, I recently wrote a book chapter on the validity and reliability of research, in which I talk

about both qualitative and quantitative research in terms of both my design model, and my criticism of some of the methods (MAXWELL, 2017). [14]

3. A Realist Approach for Qualitative Research

Mechthild KIEGELMANN: Yes, and you are also, in the qualitative community, one of the people who talk about validity; even though some other people reject validity tests as "quantitative thinking." Such arguments do not stop you. Rather, you say, "We still need to test ourselves to see if we are making a mistake." You see validity as checking if the results and theories from studies have something to do with the world out there and how to test where we might have gone wrong. You are not too scared or too dogmatic in one school or the other. Your point is, "validity testing makes sense, so let's find some way to do it in qualitative studies as well." [15]

Joseph MAXWELL: Validity is basically how you answer the question "Why should we believe it? What grounds are there for accepting this conclusion?" Basically, what qualitative researchers need to do is to provide evidence that rules out alternative possible explanations for the result. To say, "What if it was this instead of what you are claiming?" How do you convince readers of research reports that your answer is the right one? That means evidence! I have written about evidence and why evidence is important in gualitative research (MAXWELL, 2009). But I have to say that I'm feeling kind of alienated from the mainstream of qualitative research right now, because most qualitative researchers, as represented in the journal Qualitative Inquiry, are in this more or less radical constructivist postmodern stance, which I just can't connect to at all. I find Qualitative Inquiry almost entirely unreadable, even though I've contributed papers to that journal recently. That is why I wrote my book "Realist Approach for Qualitative Research" (MAXWELL, 2012), to say: "Look, there is a credible alternative to this kind of radical postmodernism, one that is not only useful, but can help you to provide a coherent argument for why qualitative research is worth doing, why it fills the gaps in quantitative research, why it is complimentary to quantitative research." [16]

Mechthild KIEGELMANN: Which is too bad if the people start excluding others. My own version of talking about conflicting positions within the qualitative methods community is this: Some of the qualitative researchers are closer to being artists than connected to psychological empirical research. There is a place for both: art and research in psychology. It is fine that people do art, but let me stay being a psychologist and working at a university, so let me do the more boring psychology-based data collecting research. There is space for all of us. I really believe in acknowledging different perspectives. I learned from you to match the choice of research methods to the research question. Sometimes we just need more artsy approaches and sometimes we need quantitative, qualitative or mixed methods, depending on the question. [17]

Joseph MAXWELL: Right. I'm not criticizing the people who want to do art-based research. My argument is that there is more to qualitative research; it can also

provide credible evidence that quantitative research cannot. That is a major argument from some of my recent papers (MAXWELL, 2020, 2021). I am actually quoting one of the bibles of quantitative research—SHADISH, COOK and CAMPBELL's book "Experimental and Quasi-Experimental Designs" (2002). Quantitative research is very good at showing you *that* a particular intervention caused an outcome. Qualitative research is needed to show you *how* it did that. And if you want to *generalize* from that study, to say that this could be useful for people in other situations, you have *got* to know what the process is, you have got to know *how* that achieved its results, because in different contexts it may work completely differently. [18]

Mechthild KIEGELMANN: I think we are now getting more into the key points of your contribution. I think you show that the process questions are the ones that are really helpful to be done in qualitative research. Would you please elaborate, what do you mean by process?

Joseph MAXWELL: I published a paper in *Qualitative Inquiry* (MAXWELL, 2020), to say that there are three major strengths that qualitative research has relative to quantitative research. A fairly obvious one is *meaning*. Qualitative research allows you to get at the meanings, beliefs and understandings that people have, which are part of the *causes* of their behavior. I do not understand why that is controversial, but for many qualitative researchers it is. They are opposed to the whole idea of causality, going back to LINCOLN and GUBA's (1985) arguments that qualitative is a different paradigm, one that doesn't use the concept of causality. In everyday life, we accept implicitly that people's ideas are causes of their behavior, and vice versa, that what they do can affect their ideas. [19]

Second: Context! Qualitative research shows you how the *context* within which something happens affects the outcome. Quantitative research is *not* very good at that. There is a great book by Nancy CARTWRIGHT and Jeremy HARDIE (2012), called "Evidence-Based Policy: A Practical Guide to Doing it Better," in which they state that quantitative researchers say that if you get a good solid randomized controlled experiment, that gives you a basis for generalizing. That is completely wrong. There is *no* inherent generalizability in a single randomized experiment, or even in a series of randomized experiments. To generalize you have to understand how the *context* within which that intervention was implemented affects the outcome, because in other contexts it may work completely differently. [20]

Mechthild KIEGELMANN: I agree. When I learned methods in psychology, we learned that we have to standardize the context so it wouldn't influence the outcome. I think there are some research questions where the attempt to reach objectivity is the relevant approach. But for other, more messy, complex phenomena embedded in everyday problems, I think it doesn't work to focus on only a few, but controlled variables. My construction of the contribution of qualitative methodologist is that if we want to do research in the messy world we have to deal with context (KIEGELMANN, 2021). [21]

Joseph MAXWELL: Absolutely. That is the whole message of CARTWRIGHT and HARDIE's (2012) book—context matters. They do not use the term qualitative, but basically, their argument is that you have to use qualitative methods ... to understand context and its effects. The other area that I've been particularly involved in is mixed methods research. Again, arguing and disagreeing with most of people in that field, too. [22]

4. Mixed Methods

Mechthild KIEGELMANN: Please explain what your key points in mixed methods are?

Joseph MAXWELL: Mixed methods depend specifically, as I said, on the complementarity of qualitative and quantitative research. There is a lot of recent research in philosophy that strongly supports the development of an alternative to the positivist idea of causality—that causality *is* simply a regular correlation between A and B. That's all it is; there is nothing more to it—nothing *behind* that. The alternative that's now getting serious attention in philosophy is *process*. Causality is a *process* by which a particular event or situation or intervention leads to a particular outcome. The two are complementary. I cited SHADISH et al. (2002), above: Quantitative research is very good at showing you *that* A affects B. Qualitative research is necessary to show you *how* A affects B—what's the process by which it does this? [23]

Mechthild KIEGELMANN: What do you think about modern statistical data collection procedures that are able to work with very large data sets, for example, to collect and analyze data every five milliseconds? These procedures allow to include temporally close data points which could be interpreted as process analysis, allow to include more complex information than simply before and after measurements.

Joseph MAXWELL: This way of thinking is in terms of variables; variables and correlations. Correlation is not a process; a correlation does not tell you *how* that action operates. If you want to *generalize* to some other contexts, you have to understand the process. You cannot assume that it is going to work exactly the same way as in the situations in which you did the studies. [24]

Mechthild KIEGELMANN: In other words: if you observe a process by collecting data every few milliseconds, that is an interesting approach in quantitative research. But that it is just one single project where context still needs more attention. ... To develop a theory and to generalize, you have to do something else.

Joseph MAXWELL: Quantitative research tends to approach this in a kind of Rube GOLDBERG—do you understand that term? He was an American cartoonist back in the last century who drew these fantastical machines by which, for example, a woodpecker pecking on something, makes a big ball drop here, which throws a lever, which gives you the outcome you wanted. Most of structural equation modeling, it's a Rube GOLDBERG process, where you look at all these different things, it's not totally valueless, but it does ignore process. It's simply making more and more intervening variables. [25]

5. Transferability Depends on the Reader or User of Those Results

Mechthild KIEGELMANN: We talked about mixed methods and about meaning and process. Context is another point that is key to the qualitative part in mixed methods.

Joseph MAXWELL: Meaning, context and process: those are the three key issues that I'm emphasizing. One of the things that I'm arguing is that the inherent generalizability of any result is a delusion. Basically, I say that *no* result is inherently generalizable. This question will be a digression but we can take the time. There were two papers published in the *British Journal of Medicine* that make this point. The first one was titled "Parachute Use to Prevent Death and Major Trauma Related to Gravitational Challenge: Systematic Review of Randomised Controlled Trials" (SMITH & PELL, 2003). The authors concluded that there *haven't* been any randomized controlled trials of parachutes; their use is based solely on anecdotal evidence! Then, some other researchers said, "We've done a randomized controlled trial of parachutes. We had 23 people randomly assigned to wear either a parachute or an empty backpack and jump out of an airplane (YEH et al., 2018). [26]

Mechthild KIEGELMANN: Empty backpack and jump out of an airplane?

Joseph MAXWELL: Yes, and with no difference in outcomes. Of course, ... to recruit participants, the airplane had to be sitting on the ground. So, they said, "Our results may not be generalizable to airplanes traveling at higher altitudes or velocities." A randomized controlled trial doesn't necessary tell you *anything at all* about its generalizability. [27]

Mechthild KIEGELMANN: When teaching, I always sum up the question about generizability ... by stating that generalizability is a claim meaning the results of a particular research study will apply to every person everywhere in the world at any time of history.

Joseph MAXWELL: Yes. Well, it all goes back to Isaac NEWTON's laws of gravity, which for centuries persuaded people that real science discovered causal laws that applied everywhere. Many people still are assuming that, at least implicitly. This led to what has been called the "Replication Crisis" in psychology (YONG, 2018)—that many published studies fail to replicate. People are still trying to argue that a really well-done study is inherently generalizable. It is not! The whole concept of transferability in qualitative research is a lot more useful, because transferability depends on the reader or user of those results, figuring out how and whether they apply to some new situation. There is no automatic generalizability to *any* result. [28]

Mechthild KIEGELMANN: In teaching, I add addressing objectivity and colonialism and postcolonialism. I invite students to reflect on and to question

what some researchers consider as "the canon." You mentioned NEWTON, you know I am German, and I also used to study theology. Do you know what I learned to read in theology? Dead white German men ... (CHUNG & KIEGELMANN, 1994; KIEGELMANN, 1991) and then I was supposed to apply their theories to the whole world. Yet I see idea of constructing theory as perpetuating imperialism. To me, the ideas of universal theories in the humanities and of generalization in empirical research are related. Do you see a connection between questioning objectivity and questioning generalizability? We were talking about generalizability and context. I see this also as a political question. It is time to overcome the unquestioned acceptance of some old paradigms.

Joseph MAXWELL: Well, some of these dead white guys had a pretty good insight into things. I am not comfortable with the idea that we need to reject these just because they were done by old dead white guys. [29]

Mechthild KIEGELMANN: Not reject because of who created theory, but to reject the assumption that such thoughts apply universally, to challenge the idea they apply everywhere in the world to anytime in history. To acknowledge that they were located and embedded in specific contexts.

Joseph MAXWELL: That is the whole argument for transferability. You have to look at the actual context within which the thing you want to understand is embedded, and say, "To what extent do these ideas help me to understand that?" As I said, my approach to research, not just to qualitative research but also to research in general, is what I call *critical realism*. Critical realism is ontologically realist; it says, "There is a real world out there, and it's not just our construction; there are things happening that we need to understand." But I combine this with epistemological constructivism—our understanding of these things is always our own construction; it's not just a reflection of reality. After recognizing both of those, and understanding that no theory can automatically apply to other situations, we have to understand what is going on in that particular situation as best we can, and develop fallible theories which are inherently partial and incomplete, and hope to improve those by testing them. To me, that runs counter to a lot of the thrust of postmodernism and constructivism in qualitative research, which rejects the idea of evidence, rejects the idea of testing conclusions and so on. [30]

Mechthild KIEGELMANN: Would you please point where you could explain a little more about coming up with an idea in opposition to testing an idea. These are two different processes.

Joseph MAXWELL: These two not just sequential like the way many research methods textbooks suggest: First, you develop all the hypotheses, then you test them. Qualitative researchers do not do that. They develop tentative ideas, then apply them and modify them in the course of doing their research. They come up with something that is a result of the interaction between their theoretical thinking and the evidence, the data, that they gathered. [31]

Mechthild KIEGELMANN: The process in qualitative research is this: Starting with a general question, then refining the question in the field. Still, once a theory is developed, it still needs to be tested. Do you think that there could be a more creative and more complex way of trying to figure out what is going on in a field? Is it possible to say that at one point researchers develop a theory and come to think that they "have" a theory? At another point, they go back to the field and check the theory and ask, "Is it wrong, does it need to be changed?" Can you separate those two processes of developing and checking, or is it always the same?

Joseph MAXWELL: What I am arguing is that the dichotomy between developing a theory and testing a theory is not useful at all. It is an interactive process. You are continually modifying your theory as you gather new data and develop new understandings of what's going on. [32]

Mechthild KIEGELMANN: Dichotomy is a wrong approach.

Joseph MAXWELL: Yes. I think that there are a lot of very good mixed method papers that illustrate why the whole process is *very* interactive, an ongoing *dialog* between theory and evidence that has to happen ... to reach a valid conclusion. [33]

6. Interactive Model of Research Design

Mechthild KIEGELMANN: We talked about major contributions to the field that you did. Then we talked a little bit about your background. I still would like to ask this question: Imagine you meet a former student and this person tells you what they have learned from you. Which of the aspects would make you happy? Which would that be?

Joseph MAXWELL: Well, the design model for research I think is primary; I think that is my major contribution to both qualitative research and mixed methods research. Do you want me to talk more about the design model? [34]

Mechthild KIEGELMANN: Yes, please. We've talked about the realism and you've talked about mixed methods but you only mentioned the design model, so I think this could be a good place to introduce your design model with the components research question, goals, contextual framework, methods and validity.

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Figure 1: An interactive model of research design (MAXWELL, 2013 [1996], p.5)¹ [35]

Joseph MAXWELL: I see the five components as having the research questions at the center and the others in the corners of the square. I think all of these are connected to one another. You have to think about your theoretical ideas and assumptions, your research questions, your *goals* (goals is the one that is in the upper left-hand corner of Figure 1). Your goals, your conceptual framework and theories, your research questions, your methods, i.e., what you actually do, and the validity issues you have to address. All of these interact with one another; you have to keep them talking to each other, through the implications of validity threats for what you can accomplish. What your theory needs to address, which research questions are answerable in the context of those validity threats and which methods you would need to use ... to address these. [36]

Mechthild KIEGELMANN: Can you talk a bit about each of the points, elaborate on them?

Joseph MAXWELL: I did not coin the term *conceptual framework* but I think I may have been the first person to use it in the context of qualitative research. One of the things that your conceptual framework is not, is just a single sort of abstract theory. Your conceptual framework consists of all the ideas that you have about the things that you are studying. These ideas influence your research questions, your methods, and the validity issues you need to address, the way you want to proceed in terms of investigating. That is a piece of the design model that I think is an important contribution: identifying the conceptual framework as not just a theory, but all your thinking about the things that you are studying, as a key component of design. [37]

Mechthild KIEGELMANN: In Germany, I am used to the questions, "What is the state of the art? What do we know?" When I teach, I say that knowing the state of

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the art is only one part of the conceptual framework. A second part is more general, e.g., am I a psychoanalyst or am I a behaviorist? Conceptual framework is also about the theoretical school I am coming from. A third aspect is to acknowledge my personal assumptions, reflect on myself as a person embedded my specific social context and with my idiosyncratic thinking. [38]

Joseph MAXWELL: Including in that your prior ideas about the thing that you are studying. The conceptual framework includes what you already believe, perhaps implicitly without even recognizing it. Which is why I talk about memoing as a key tool for research. Write memos about your ideas; where did this come from? This originated in my work on diversity, which I have not mentioned yet. I was talking to the philosopher Amelie RORTY, who had just given a talk on diversity in PLATO. She asked me how I got interested in diversity, and I could not answer that. She said she had a very clear idea, because her family moved from Belgium to the United States, decided they were going to be real Americans, and bought land and started a farm, in I think rural West Virginia. This is how she really understood diversity as part of her own history and background. Her ideas made me think that I had to start writing about where my ideas about diversity come from, my own experience. As I said, it goes back to that I always felt that I was different from other people, and the way I got along with them was not by being *like* them but by being helpful to them. It led to a whole theory of society, one that said, society is not held together by the things we hold in common and by our shared beliefs. Society is held together by the interaction of diverse ideas and beliefs. It is a theory of society that I have not published yet. [39]

Mechthild KIEGELMANN: I am looking forward to reading your theory of society. For now, please first talk more about your design model and then we go into the diversity and future plans.

Joseph MAXWELL: The other thing that I haven't mentioned is qualitative data analysis. I've had some ideas about that, but not really pulled it together, when one of my students, Barbara MILLER, wrote a paper in one of my courses on her study of adolescence friendships, in which she identified two ways of thinking about their friendships. Her adolescent respondents talked about ways which they felt *similar* to other people, and about the *interaction* they had, the interaction of differences. I read her paper and I said, "Barb, we've got to write a paper on this!" It ended up being the paper that we wrote on categorizing and connecting analysis in qualitative research—that there are two *ways* of thinking about qualitative data (MAXWELL & MILLER, 2008). You can think about how the data are *similar*, how you can fit them into different categories, and you can think about the way which particular pieces of data *connect* to other pieces. These are different, and it goes back to the distinction between similarity and contiguity in linguistics. That is another piece that I think is one of my contributions to the field. [40]

Mechthild KIEGELMANN: In your design book, you have little tasks like "write a memo about your researcher identity" or "write a memo about theoretical assumptions"; your book has suggestions for exercises like a textbook.

Joseph MAXWELL: Yes. Memoing has been a staple of qualitative research for decades. What I did was to specifically connect memoing to design—how you write memos and use them to help you design the different components of your research. [41]

The other thing that I do in my book that I think is innovative, is to talk about how all of this relates to writing a research proposal. My design model gives you a far better *map* of how to think about a research proposal than a lot of what is out there in the literature. You really have to think about all five components. I *map* my design model onto the usual structure of a research proposal; how you would deal with each of those pieces has to be very different from the traditional view. You are not just talking about a literature review; you are talking about your conceptual framework. [42]

Mechthild KIEGELMANN: For students, five points appear doable. The design model gives a structure and you still go much more in depth by asking people to figure out how they themselves think. Would you like anything to add on the topic of connection and interaction?

Joseph MAXWELL: Fundamentally, all of my thinking at this point is grounded in a realist approach to research. That there is a real world out there that we are trying to understand, but our understandings of that are always tentative and partial and incomplete. We have to do our best to try to improve those, to make them better at giving us a sense of what is actually going on at the things we study, which philosophically is called epistemological constructivism. Epistemology in the sense of how do we understand the world. [43]

In my book, I talk about the tools and strategies. For your goals, you have to write memos about "Why am I doing the study, what is it that I want to come out of it?" Unless you have a clear sense of what your goals are, you can't be reasonably confident that this research is going to help you attain them. [44]

Mechthild KIEGELMANN: Can I just jump in? When I work with my students at the beginning of their dissertation process, I say, "Just imagine you are done and stand in front of a buffet at a party, you do not have much time and someone asks you, 'What did you find out in your dissertation?' Just say it in one sentence."

Joseph MAXWELL: Right. This is like talking to someone in an elevator and you only have 15 seconds to explain it. [45]

Mechthild KIEGELMANN: Yes. In my version, I invited the students to envision a cocktail party, with standing right at the buffet and being hungry and so on. I do have fun making up a little story for the students at the beginning of their research. I invite the students to say what the central point of their interest in their dissertation project is. There is another aspect to this exercise. I say, "Well, after a year or so you might be going to get really frustrated with your dissertation project and you might want to give up. Knowing from the start, why you want to stress yourself with this research will keep you going when you get frustrated."

For me this touches on the question of values. Why is it worth spending years of your time in doing this dissertation? [46]

Joseph MAXWELL: I think the reason that people get stymied, that they feel like they want to give up, is because they have not really thought through the connections among the different components of the research and really used that to build a systematic research design. I have had students, who may have felt like "I failed," call me up and say, "I have finished another draft of my dissertation proposal." I give them detailed feedback. Then I do not hear from them for six months, but then they say, "Oh, I have got another draft of my proposal." And it still has many of the same problems. It takes work to really think about the different components and how they interact to shape the research you want to do. That is hard work! My goal in writing the design book was to give people a clearer model of how to do that, so that they are not just starting from scratch and saying, "Well, what do I do now?" I hate the term "step by step" because the process is not linear, it is systematic. I give the readers lots of tools; concept mapping as a tool, memos as a tool, various kinds of memos. In one chapter, there is one I call the "argument memo" for a proposal-not just "what are the topics you are going to deal in your proposal?" but what is the argument that you are making, to lay that out systematically. Then you know that you really are making a persuasive case. [47]

Mechthild KIEGELMANN: As a theologian, I always say, "In theology there used to be a discipline called 'apologetics'." I take the existence of apologizing as an academic discipline as an invitation to the students to get defensive and to state in their proposal, "I'm right, I know what I am talking about and I have thought this trough: others have to listen to me!" In this sense, I teach design in a defensive way, invite the researchers to imagine potential people who are saying, "This work is not worthwhile." I invite doctoral students to be prepared to convince critical voices, including their own self-doubts. This way, students have to understand that I am not trying to be mean to them, but inviting them to bring to the point why it is worthwhile to do this dissertation, why spending all this energy on it.

Joseph MAXWELL: You are never going to be able to persuade everybody, but you can persuade some people. I feel like too many qualitative researchers have basically given up on the task of justifying qualitative research to quantitative researchers. [48]

Mechthild KIEGELMANN: Yes, remember when you were in Germany and gave the key note in 2001 at the workshop of the Center for Qualitative Psychology (MAXWELL, 2002)? I have the feeling that the times are much more optimistic now than they were in 2001 or when you gave a talk at the workshop of the Center for Qualitative Psychology in Finland (SOINI, KRONQVIST & HUBER, 2011). Today, at least in psychology, in the statistics textbooks, there often is a chapter at the end about generating hypothesis, acknowledging a little bit of qualitative methods. This is not the end of fully respecting qualitative research methods, but at least it is an acknowledgment. I remember that 20 years ago people came to our session on qualitative research at a national psychology congress, only to show up to tell us how wrong and evil qualitative work is. Today, I think this aggressive tone seems gone. Now at least we qualitative researchers are seen, qualitative researchers exist. This is a good point in keeping up the dialogue. [49]

Joseph MAXWELL: I agree. We are slowly getting past the paradigm wars period, in which LINCOLN and GUBA (1985) basically said that qualitative and quantitative are fundamentally incompatible; there is no way that you can put the two together. Mixed methods research, I think, is making an important contribution. But I really disagree with a lot of the things that the self-identified mixed methods community writes in textbooks about mixed methods research. [50]

Mechthild KIEGELMANN: What is your critique?

Joseph MAXWELL: First, the model of design. There are these design typologies. "Is this an exploratory design or is it an explanatory design?" The idea of 38 different mixed methods designs is nonsense. Everybody sort of creates their own design, systematically or unsystematically, from their conceptual framework, from the background that they have in reading research, from their goals and so on. I just find those typologies not at all helpful. I also think that many mixed methods researchers are ignorant of the broader history of mixed methods research. I have written a couple of papers about that (MAXWELL, 2016, 2018). Mixed methods research goes back three thousand years; the Babylonians were doing mixed methods research, combining quantitative data with observations in astronomy. It continued to develop. Back in the 19th century, there were people doing mixed methods social research. This does not get addressed enough. I feel like I am a gadfly in the mixed methods community; I am the person who stands up in meetings and says: "What about ... I disagree!"

Mechthild KIEGELMANN: This way, you keep the dialogue and the thinking going.

Joseph MAXWELL: I hope. [51]

Mechthild KIEGELMANN: I have another question: I am interested in the question about objectivity in the context of discussing differences in basic research versus applied research. I suggest that research benefits from being useful. The purpose is of research is not objective, but is embedded in a (political) agenda and linked to specific values. I teach novice researchers to lay the values open. The purpose is beyond descriptive understanding, beyond explaining the world just for the sake of explaining it. In this context, I ask you: What is your take on basic research and applied research? [52]

Joseph MAXWELL: I am not sure how useful that distinction is in the social sciences. I cannot really speak for psychology, but in the social sciences, there is not this sharp distinction between developing and establishing a theory and applying it. A lot of the most important theoretical work actually does come out of applied research. [53]

Mechthild KIEGELMANN: Do you think research is objective? Value free?

Joseph MAXWELL: I do not even use the term objective anymore. Because it suggests that there is some possibility of directly understanding, infallibly understanding, something about the world. I believe that all our understandings are our constructions. But those constructions can be useful in understanding and helping us to deal with the situations in which we and others find ourselves. [54]

Mechthild KIEGELMANN: Being useful is the applied part?

Joseph MAXWELL: Yes. there is a recognition that people who see themselves as theoreticians or basic researchers, developing theory, and people who do applied research, need to be talking to one another. There is an interaction and a complementarity of those. It is not really useful to think of them as completely separate. [55]

Mechthild KIEGELMANN: We have not talked about the future. What are the projects you are thinking about doing next? You started with saying that you are still doing the same type of work as you did before retirement. What are your plans?

Joseph MAXWELL: The things I have been mostly working on recently is, first, causation. To make the case that qualitative researchers do not need to be afraid of causation. It is a perfect legitimate concept within qualitative research, and qualitative research has major strengths in addressing causation, as I described earlier. Quantitative researchers need to understand the fallacies that had led quantitative researchers to claim their methods are superior, and what qualitative research can seriously contribute to causation, particularly for causal generalization of their research. I hope to eventually write a book on mixed methods research, pulling together themes from various papers I have written on that. I have been dealing with a couple of things that have taken much longer than I thought they would. A couple of them were developing online courses, one on causation and mixed methods research, and one on the history of mixed methods research. Now that I have those cleared away, I want to finish a 4th edition of my qualitative research design book, to include a chapter on mixed methods research, about combining qualitative and quantitative methods. At some point, I would like to address the replication crisis in psychology, because I think a lot of the arguments around that are wrongheaded. There is this widespread misunderstanding of statistical significance tests. People think that it contributes to some kind of generalizability; it does not! That is a complete misunderstanding of what a P value actually tells you. [56]

Also, the assumption that there have to be causal laws somewhere ... for this to be science. That is what I am working on now. My argument is fundamentally that qualitative research is basically scientific in the broad sense of attempting to understand the world. I think that pretty much summarizes what I am working on now. [57]

Mechthild KIEGELMANN: Well, it sounds like a lot. How many years do you want to work on all of this?

Joseph MAXWELL: Till I die probably.

Mechthild KIEGELMANN: No real retirement in sight. My last question is, do you have a final word? Is there something that is really important to you and that we did not address in this interview?

Joseph MAXWELL: I do not think so. I cannot think of anything that we have not addressed. Underlying almost everything that I have talked about is a realist approach that says, "Look, we are trying to understand things that go on in the world. Those are real things. We have to accept that they are real, that they are not just our constructions, but we have to accept also that any theories and results that we have are our constructions. We are doing the best we can to get a partial and incomplete and potentially fallible understanding of what is going on in the world." I think that is fundamental for both qualitative and quantitative research, to understand the limitations of each approach—what qualitative research is good at that quantitative is not and vice versa. [58]

References

Cartwright, Nancy & Hardie, Jeremy (2012). *Evidence based policy: A practical guide to doing It better.* New York, NY: Oxford University Press.

Chung, Hyun Kyung & Kiegelmann, Mechthild (1994). Frei von toten Deutschen. Schlangenbrut – Streitschrift für feministisch und religiös interessierte Frauen, 45, 39-40.

Fetterman, David M. (1988). Qualitative approaches to evaluating education. *Educational Researcher*, *17*(8), 17-23.

Kiegelmann, Mechthild (1991). Interview mit Dr. Katie Cannon, Professorin in Cambridge, Massachussetts, USA. *Schlangenbrut – Streitschrift für feministisch und religiös interessierte Frauen*, 35, 30-35.

Kiegelmann, Mechthild (2021). Adding listening and reading for social context to the voice approach of the listening guide method. *Qualitative Psychology*, *8*(2), 224-243.

Lincoln, Yvonna S. & Guba, Egon G. (1985). Naturalistic Inquiry. Newbury Park, CA: Sage.

Maxwell, Joseph A. (1999). A realist/postmodern concept of culture. In Liza Cerroni-Long (Ed.), *Anthropological theory in North America* (pp.143-173). Westport, CT: Bergin & Garvey.

Maxwell, Joseph A. (2002). Realism and the roles of the researcher in qualitative psychology. In Mechthild Kiegelmann (Ed.), *The role of the researcher in qualitative psychology. Qualitative psychology nexus: Vol. 2* (pp.12-31). Tübingen: Verlag Ingeborg Huber, <u>http://qualitative-psychologie.de/NEXUS/nexus-vol02.pdf</u> [Accessed: March 25, 2023].

Maxwell, Joseph A. (2009). Evidence: A critical realist perspective for qualitative research. In <u>Norman K. Denzin</u> & Michael D. Giardina (Eds.), *Qualitative inquiry and social justice* (pp.108-122). Walnut Creek, CA: Left Coast Press.

Maxwell, Joseph A. (2012). A realist approach for qualitative research. Thousand Oaks, CA: Sage.

Maxwell, Joseph A. (2013 [1996]). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.

Maxwell, Joseph A. (2016). Expanding the history and range of mixed methods research. *Journal of Mixed Methods Research*, *10*(1), 12-27.

Maxwell, Joseph A. (2017). The validity and reliability of research: A realist perspective. In Dominic Wyse, Neil Selwyn, Emma Smith & Larry Suter (Eds.), *The BERA/SAGE handbook of educational research* (pp.116-140). London: Sage.

Maxwell, Joseph A. (2018). The "silo problem" in mixed methods research. *International Journal of Multiple Research Approaches*, *10*(1), 317-327.

Maxwell, Joseph A. (2020). The value of qualitative inquiry for public policy. *Qualitative Inquiry* 26(2), 177-186.

Maxwell, Joseph A. (2021). Why qualitative methods are necessary for generalization. *Qualitative Psychology*, *8*(10), 111-118.

Maxwell, Joseph A. & Miller, Barbara A. (2008). Categorizing and connecting strategies in qualitative data analysis. In Sharlene Nagy Hesse-Biber & Patricia Leavy (Eds.), *Handbook of emergent methods* (pp.461-477). New York, NY: The Guilford Press.

Maxwell, Joseph A.; Sandlow, Leslie J. & Bashook, Philip G. (1986). Combining ethnographic and experimental methods in evaluation research: A case study. In David M. Fetterman & Mary A. Pitman (Eds.), *Educational evaluation: Ethnography in theory, practice, and politics (pp.121-144)*. Newbury Park, CA: Sage.

Müller, Franziska & Kiegelmann, Mechthild (2020). Tagungsbericht: 18. Treffen des Zentrums für Qualitative Psychologie. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 21(2), Art. 10, <u>http://dx.doi.org/10.17169/fqs-21.2.3177</u> [Accessed: April 5, 2023].

Patton, Michael Q. (1980). Qualitative evaluation methods. Beverly Hills, CA: Sage.

Shadish, William R.; Cook, Thomas D. & Campbell, Donald T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton, Mifflin and Company.

Smith, Gordon C.S. & Pell, Jill P. (2003). *Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials. BMJ*, 327(7429), 1459-1461, <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC300808/</u> [Accessed: April 5, 2023].

Soini, Hannu; Kronqvist, Eeva-Liisa & Huber, Günter L. (Eds.) (2011). *Epistemologies for qualitative research. Qualitative psychology nexus: Vol. 8.* Tübingen: Center for Qualitative Psychology e.V.

Yeh, Robert W.; Valsdottir, Linda R.; Yeh, Michael W.; Shen, Changyu; Kramer, Daniel B.; Strom, Jordan B.; Secemsky, Eric A.; Healy, Joanne L.; Domeier, Robert M.; Kazi, Dhruv S. & Nallamothu, Brahmajee K. (2018). Parachute use to prevent death and major trauma when jumping from aircraft: randomized controlled trial. *BMJ*, 363, 1-6, <u>https://www.bmj.com/content/363/bmj.k5094</u>. [Accessed: April 3, 2023]

Yong, Ed (2018). Psychology's replication crisis is running out of excuses. *The Atlantic, November 19,* <u>https://www.theatlantic.com/science/archive/2018/11/psychologys-replication-crisis-real/576223/</u> [Accessed: March 31, 2023].

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