Introduction to Research Prof. Rajesh Kumar Prof. Prathap Haridoss Department of Humanities & Social Sciences Department of Metallurgical and Materials Engineering Indian Institute of Technology, Madras

Lecture – 37 Research in Humanities & Social Science

Prof. Prathap Haridoss: Hello, today we have with us Dr. Rajesh Kumar. He is faculty in the Department of Humanities here at IIT, Madras and we are going to discuss research in humanities and different aspects of research in humanities, so that if you are aspiring student in this field, it will give you some sense of what to look forward too, when you get into this field. Dr. Rajesh Kumar has a PhD in Linguistics from the University of Illinois at Urbana-Champaign in the United States and he works in the areas of a language in education, social linguistics, linguistic theory and language and cognition. So, he is eminently equipped to discuss these issues in the context of research in the humanities and so, with that brief introduction we will start with discussing this topic with Dr. Rajesh Kumar. So, tell us, what are traditional areas of research in humanities?

Prof. Rajesh Kumar: See, the Department of Humanities in Social Sciences in any IIT is has a unique feature, which is **it's** intra-disciplinary and multidisciplinary nature. So, in this department at IIT, Madras, we have a traditional areas like economics, literature, linguistics, philosophy, history, sociology and it is several other branches which are is new emerging areas and also, what has been added recently is the developmental studies. Apart from that, Department of Humanities and Social Sciences has 3 more areas which has been added and they are like China studies, European studies that is European union study and also there is a center called Indo-German center for sustainability study. So, most of the traditional areas in that you find in any domain of humanities and social sciences are covered, as research area in the department.

Prof. Prathap Haridoss: Okay and, so do most of the students join your department tend to go towards these, traditional areas of research or is it more towards the more recent areas that you have opened?

Prof. Rajesh Kumar: In the recent times, because of the multidisciplinary in nature of humanities and social sciences in general. You have lot of new emerging areas, for example; in the history one of **it's** not really new but, one of the new areas that can be counted is history of science. In the developmental studies, the intersections with this with ideals like politics and gender and sociology of religion. In the field of linguistics as well, we have language and technology the use of temperatures in teaching methods.

So, they are all kinds of new areas emerging as well. In the traditional area of literature when you divide it into several parts, we cover American literature, African literature, English literature, Indian literature, Indian writing in English and all of these are new emerging areas that have covered in humanities and social sciences. And, most of the students in the recent years who come, they already have one or these, one or the other of these areas in their mind. So, they don't know to come for broad area of studying English or English literature only. And, even within that specific domain of let us say African literature or American literature they have certain specified ideas as well and if not over a period of time those areas emerge in the discussion with their respective faculty, where they go to the specific area in depth.

Prof. Prathap Haridoss: Okay actually, since you mentioned intra-disciplinary areas of research and also the fact that you know many engineering institutions including IIT's have a humanities department. What exactly and since we are been viewed by a general audience, what exactly do you feel are the boundaries of humanities? Where I mean, what are the set of topics that you feel encompass the range of things that people working in humanities focus on, as supposed to any other?

Prof. Rajesh Kumar: Right. In fact, there is when it comes to humanities and social sciences and not almost all IIT's have this department. And, I can speak about the humanities department, here there is no limit in fact and we see the research ranging in health, policy, technology, ethics, religion and these areas do find a space in existing areas as well. So, there is no limit, no boundary that restricts us. In fact, locating this humanities and humanities and social sciences department in IIT gives it, some kind of a expansion where it is easy to transcend to technological domains. And they, faculty and the students both researchers can venture out in to areas where they get data readily

available. For example, someone wants to look at the use of technology in health.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: You can easily find someone working in this area in Computer science, Bio technology or Electrical engineering where you see their applications of technology from these areas and then social scientist's do make a research question based on that, what's the impact of these things in assessment of health? For that matter what, how does, for example, how does the entire sector of health does any kind of ethical practice or not.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: So, beginning from the technology to ethics to practices locating in an IIT, instead of restricting it form anything else actually opens up more possibilities.

Prof. Prathap Haridoss: More possibilities ok. So, now if you look at it from student perspective, some students who come to join humanities department and may be a humanities department in an IIT, what do you think are major challenges that they may face or they tend to face when they join such a department? Are there such challenges, something uniquely there for them that, they should be aware of?

Prof. Rajesh Kumar: Right, there is one specific thing which becomes technical challenge. That is, it's not a department of a particular discipline. For example, if someone wants to come to study linguistics, there are limited numbers of people in terms of faculty doing research in linguistics and like any other discipline linguistics or history or philosophy or economics they are huge disciplines, they are several sub areas in that. So, the students have to come prepared to be interacting with a limited number of faculty and a staff, in this specific area. And then, for example, linguistics has 4 more core areas like, Syntax which deals with sentences, Morphology which deals with words, Phrenology which deals with sounds and then Social Linguistics that deals with language and society. One person can have limited expertise in all 4 of them, that becomes general linguistic. But, if you want to talk to a specialist in Phrenology or Computational

Linguistics or let's say Morphology, then you have to seek help from outside.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: And, that is one of the things I would imagine, applies to all other disciplines that are part of humanities and social sciences in a department like this.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: Where you don't have a department of sociology separately, where people study all aspects of sociology or a department of linguistics separately, where people study all aspects of, most of the aspects of linguistics that's one of the limitations that students face. And, in terms of research materials also we there was a time and people face such problems, but now with the emergence of electronic help available in materials being available electronically that is no more a problem. But, it again to go back to the strength part of this take the example of my own discipline linguistics, it's like a virtual discipline, it may not have a department of, it may not look like a department of linguistics, but there it is a virtual department in the sense that, I know at least 4-5 other colleagues working in 4 different departments on several aspects of linguistics.

So, on one side when we do not get to talk to or meet with this specialist on daily basis, on the other side, you have a specialist that you were disposal locally where you can talk to people with a specialties in emerging areas of.

Prof. Prathap Haridoss: Emerging areas.

Prof. Rajesh Kumar: Linguistic. So, it has a combination of a limitations and advantages in being located in IITs

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: In Technological Institution.

Prof. Prathap Haridoss. So, even in general I mean when you associate were both in IIT's and even outside anywhere else where say humanities departments are there. I mean, I think there is a lot of recognition about the value of humanities in life.

Prof. Rajesh Kumar: Right.

Prof. Prathap Haridoss: And, in general you know social sense. Where do you see, it's utility in say with respect to industry, where in to what degree do you see industry interested in people with a humanities background? What sort of backgrounds are they interested in? And how do a people students graduating with the humanities degree? Where do they see value in, where do they fit in?

Prof. Rajesh Kumar: Very interesting, see one of the things that I use in most of the courses that I teach and it applies to all disciplines and all areas of humanities and social sciences. What we try to prepare students with is, most of the things that you learn in humanities and social sciences either at under graduate level or at a graduate program, are going to be more useful when you go outside the boundaries of IIT or any academic institution for that matter. This is not to underestimate the value of any other discipline, but when you get the disciplinary expertise in Electrical Engineering or a Mechanical Engineering, you demonstrate your learning in a skills of those disciplines only among the peers and in a very restricted environment, where you are suppose to be competing with the other Electrical engineers and Mechanical engineers.

Whatever expertise you deal, you gain out of the courses in humanities and social sciences is going to be useful everywhere that's one broad thing which I wanted to say about that. Now, being a specific to what kind of contributions can humanities in social science graduates with all kinds of expertise in these disciplines make which are useful for industry, that's also numerous. I mean you can simply count. I will tell you the example of one of the things of that I am doing on one of the projects that I am working on. Most of the industries require a cordial relationship with the society in which they are going to be establishing their thing.

Prof. Prathap Haridoss: Immediate community.

Prof. Rajesh Kumar: The Immediate community. So, they need to, you know the complex nature of our country in terms of it is multiculturalism and multilingualism. They need to be in association with the local people. So, to in order to understand the society languages, politics, cultural practices and everything, every industry requires a social scientist to help them navigate through these. I am not sure yet, how industries are hiring people on keeping these issues in mind or not.

Prof. Prathap Haridoss: But you see the value, they have the need for it and they have different insight.

Prof. Rajesh Kumar: Definitely, not only the need it is time that they cannot ignore it any further and we see lot of conflicts emerging in our socio-political condition, situations in this in our country with local issues and industry they are all located in these domains and if they apply the findings of research in humanities and social sciences and they have people equipped with these things then probably they will reduce such difficulties.

Prof. Prathap Haridoss: Okay That is a very I think a very valuable insight.

Prof. Rajesh Kumar: Ok.

Prof. Prathap Haridoss: I think a lot of industries and people from industries who are,I mean may be looking at this kind of information.

Prof. Rajesh Kumar: Absolutely.

Prof. Prathap Haridoss: Possibly find that very useful to apply. So, may be, some mundane questions let me ask you. So, we have in humanities I think the kind of work you do is very different from say, what an engineering activity, yes. There may be I think there is some much more controlled experiment that we do, I am sure some analogues thing may be there in humanities. So, what do you see as, you know the amount of

interaction that must exist between say students coming in and the faculty that they working with, how often you feel they need to meet them, to you know optimally learn something at the same time do something new, how much do you see of this interaction being necessary to what how important to it is how often should it happen?

Prof. Rajesh Kumar: To see as you rightly said there are some areas in humanities and social science also where we need controlled environment for research, but in general and in linguistics and my area in particular, this is again one of the things that I metaphorically use. The laboratory for research on language begins where all laboratories end that is the whole world is laboratory for that.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: For that, now, so that's the domain that you have to cover in your research, in humanities and social sciences, given a particular are. How often should the interactions be which is not very different from any other discipline?

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: I would say based on my own experience in research with, when I was doing my own research with my supervisor or when I do research now with students, I think a meaningful discussion of an hour in a week is sufficient and required. If that meaningful discussion takes place 1 hour of material takes place 3 or 4 hours it depends in individual student and the faculty, but a meaningful contentful discussion where you evaluate what has been done, what has to be done next and where we are today, requires 1 hour.

Prof. Prathap Haridoss: 1 hour.

Prof. Rajesh Kumar: 1 hour a week and then with total honesty research scholar has to translate their discussion into reality, function and work in their own work.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: And, whenever they decide their agenda for the next meeting, the ideal and optimal goal for any researcher scholar to be successful in this and to be disciplined in the research, is to come up prepared with at least, I mean they have to give it an effort to be prepared with at least 75 percent of what they discussed their in the previous discussion.

Prof. Prathap Haridoss: In the previous discussion, yeah, yeah.

Prof. Rajesh Kumar: In the next meeting.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: So, that kind of discipline in terms of meeting is required in humanities and social sciences in particular and I am sure it is required for all other disciplines as well.

Prof. Prathap Haridoss: I think similar things should be there. Also, when students graduate from your department, even when we talk of MS degree or a PhD degree these are always treated as degrees where somebody as specialized in something very specific and so there is always this feeling amongst people who complete you know under graduate the kind of degrees before they pick up or enroll for a PhD or a MS degree is always this concern that later people may look at us and say we are specialist and there is not an easy fit for us in a position somewhere. Where do you see most of your MS master students or PhD students, students who complete these degrees, where do you see them you know joining for positions that are you know professional positions in locations?

Prof. Rajesh Kumar: Most of the masters students in this department go for their PhD's in higher studies at different places. We have a 5 years integrated program, where students come after their 12th grade. They spend substantial 5 years chunk of their life here and

they learn something and then they must go for some, if they are interested in higher studies to some other institutions to see and verify what they have learnt here is meaningful.

In terms of what they choose to do for master students, we see mostly going to higher studies some of them go to government civil services jobs, some of them preferably join non-government organizations to learn more about this specific areas, take for example, somebody is specialized in some issues in developmental studies like gender, equality or sustainability studies or like a resource management and water resource management or health care management and all that. So, they do find jobs in these areas and there are lot of unconventional areas which were are not available let's say, 10 or 15 years ago are coming up with for hiring of these people. I just interacted last week with 2 of them who are working in the area which I never thought in for, where a student with humanities degree will be working, they were working in marketing.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: So, what we were discussing a minute ago certain industries and in particular upcoming industries work kind of startups are realizing the roll of expertise in humanities and social sciences in the areas of marketing, in the areas of, in all kinds of area where you need human interactions.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: And, PhD students also have some of them joined Post Doctoral programs and some of them have joined teaching in research programs at various educational institutions. So, these are these are some of the areas where we find then working.

Prof. Prathap Haridoss: Okay Great. Right. So, I think we will close with this question here, which, what advice would you give to an aspiring student who would like to join graduate studies in humanities?

Prof. Rajesh Kumar: Very significant question, this is we face and particularly students face these questions. See, research in any discipline requires certain kind of discipline. So, they should be committed to their discipline to their academic discipline in a disciplined fashion.

Prof. Prathap Haridoss: Ok.

Prof. Rajesh Kumar: That is one. Second, is they should be, it is a full time job. So, 24 hours.

Prof. Prathap Haridoss: Full time activity.

Prof. Rajesh Kumar: Full time activity. And you should, what you are doing it should reflect as your interest, should not be a burden for you. The movement its starts burden means that you are losing your interest, so to keep up your interest in this discipline in any discipline of your choice.

Prof. Prathap Haridoss: You should enjoy doing that.

Prof. Rajesh Kumar: You should enjoy doing that. If you don't enjoy doing that, then that is one of the parameters where you have to realize that you have to find something else to do. Third and very significant that there are lot of things, but at third that I would add from my personal experience is you should be leading something more than you are own discipline as well, so that you are aware of what's happening around you and in other disciplines.

So, if a research program in any discipline, at any academic institution I making it more general is must give you a holistic development and at the end of it if you say, I have done my research in mathematics and I only that also in mathematics I have done it in algebra and I only understand is maths, it does not make you look too good. So, as a mathematician or as an engineer and as a social scientist if you are aware of the fundamentals of other things, you are aware of fundamental of what's happening around

and what's coming up in literature, that keeps you alive and any intern it has huge implication we can we can discuss with at length at some other time. But, what you read outside your own discipline has huge implication for reading and development in your discipline as well.

Prof. Prathap Haridoss: Yeah, I think it opens up lot of new ideas, new thought processors.

Prof. Rajesh Kumar: And the least it does it gives you habit of reading.

Prof. Prathap Haridoss: Yes, of course.

Prof. Rajesh Kumar: So, these are at least 3 things that people should be prepared for, when they take up research in humanities and social sciences in particular and in any other discipline in general that I would think.

Prof. Prathap Haridoss: Okay great. Those are nice words to know, a nice thoughts to keep in mind. So, I would like to thank you for joining us and you know giving us this insight into humanities, which I think a lot of a students across the country consider as an option that they should look at and certainly for you know higher research in these areas, it is nice to have an expert tell us, what is it that they would like to, I mean likely to experience and so I thank you for that.

Prof. Rajesh Kumar: Thank you very much.

Thank you.