

Barrett Oral History Project
Interview with Professor Richard Creath
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Primary Interviewer: Matthew Jernstedt
Notetaker: Matthew Jernstedt

Jernstedt: Hello, this is Matthew Jernstedt interviewing Professor Richard Creath on February 20th, 2019 at 10:38am in Life Sciences C building [on the Tempe ASU campus]. This interview is part of the Barrett Oral History Project. Our goal is to preserve a record of Barrett's history in honor of our 30th anniversary. Professor Creath, thank you so much for taking the time to sit down with us and share your experiences.

So, we'll begin with some personal history: What was your own experience as an undergraduate student like, and how did you become interested, initially, in the field of philosophy?

Creath: Well, I actually started out in an entirely different direction. I thought I wanted to become a lawyer, and I would major in political science, and I actually liked my American national government courses and all that sort of stuff, but I became...I mean I took a philosophy course in my freshmen year, and I was intrigued by it. I don't think it was particularly well taught, but I was interested in the topic and I sort of moved off in that direction. There was no point at which I said, "Okay, now today I'm a philosophy major." I just moved more and more in that direction.

Jernstedt: It was a gradual process.

Creath: It was a very gradual process. There was no date on which I made a decision, but it has proved to be a perfect choice for me. Wouldn't be for other people, but it was for me.

Jernstedt: Wonderful. And did either of your schools have any programs that were similar to the honors college and what it is today?

Creath: Well, yes, I wrote an honors thesis as an undergraduate. You have to understand that it was a very small school, vastly smaller than Barrett itself...the whole college was smaller, it was about 1200 students.

Jernstedt: This was Knox College?

Creath: This was Knox College, it's in western Illinois, it's a small co-ed liberal arts college. It's fairly old, and there you were thought to...you went off and you were sort of isolated there. Cars were not allowed, and students were not allowed to have cars. But it was an excellent school, and I could have gone elsewhere, but this was what appealed to me. I enjoyed my time there very much, and so I...as I

say, I wrote an honors thesis in which I was able to do original work, and I didn't have as much guidance as one gets in Barrett these days, in part because I started with one instructor who got me particularly interested in philosophy of science, and for reasons having to do with the degree he was working on, he suddenly had to leave at the end of that academic year. So, my thesis was officially overseen by someone else. He couldn't offer much guidance because his field was very different, but he could offer me expert commentary and feedback on it, which I very much enjoyed, and he remained a friend for the rest of his life.

Jernstedt: Wonderful. We'll revisit that issue of mentorship in a moment, but I want to capture a phrase you used a minute ago, which was "I could have gone elsewhere", regarding your choice of college. So, what made you choose to come here to teach at Arizona State University when, again, you could have gone elsewhere? And certainly now, given your stature in your field, what made you choose to come here to continue your research into the philosophy of science?

Creath: Well, I came for the food. [Laughter] That is to say, they offered me a job and I like to eat. Jobs were scarce, and this was a good job to have. I stayed, and I have stayed for a very long time as you know, because ASU became a very good place for me to do my research. Not because it was a highly ranked program, but because it gave me the freedom to do my weird sort of work.

Jernstedt: Sure.

Creath: And had I gone to a more prestigious place at the time, I would have been forced, in a way, to be more fashionable, and this place gave me the freedom to do what I needed to do, and moreover the department as a whole improved dramatically. There have been a lot of changes – I've been in the philosophy department for 34 years, and sort of still am, though one-hundred percent of my time is over here at the School of Life Sciences, where the program in history and philosophy of science, which I direct, has moved. And so it's extraordinary, in a way, to be able to do history and philosophy of science in the context of a science unit. I remain the same philosopher I always was, in a way, but context matters, as any historian would tell you, and connecting it to the lifeblood of science – whether it's biology or physics or whatever else – is facilitated by being here in a science unit.

I think most of the administrative divisions that one has to have – especially in a university of this size, but still one has anywhere – are somewhat artificial. So, I don't, well, philosophy is a profession: it's a community of people who have their professional standards and so on and talk with one another. It's important for me to be able to talk with people outside of philosophy and this is an opportunity that we have here at ASU that we...that one wouldn't have at other places.

Jernstedt: So, as you just said, you have been here for quite a long time, meaning you've had the chance to observe a lot of pivotal moments in the department's history. Certainly, under President Crow, there's been an emphasis on more

interdisciplinary departments. Could you talk more about those pivotal moments, particularly one you might have played a strong role in?

Creath: Well, I'm not sure exactly what is most pivotal and so on, that's hardly...hard for me to say, but certainly the development of the history and philosophy of science program – and one that's, in fact, quite good – a graduate program, PhD program, all the rest...and having around me a set of colleagues that I very much admire, we all have to work for that. I'm not sure that my work is more pivotal than anybody else's, but certainly I have worked to make it a community where it's not a question of what one personally gets out of it, but what one contributes to it, and the community is mutually reinforcing in a way, that the sometimes highly competitive programs lack.

Jernstedt: So, I'd like to ask now about your relationship with Barrett, the Honors College – and because you've been here since 1974, of course you were at the school before it was Barrett, the Honors College; it was simply *the* honors college. So, can you tell me how did that relationship begin, and how have you seen the honors college evolve over your tenure?

Creath: Actually, it wasn't even the honors college at that point – there wasn't a college. There was an honors *program*, and I'm not sure when it began, but it certainly was a minor part of campus life at best.

Jernstedt: A bit of an afterthought.

Creath: Yes, and fairly early on in my tenure here, Ted Humphrey, who later became Dean of the honors college, was chair of the philosophy department, and asked me to participate in the Human Event, which hadn't been started yet. So, going from very small beginnings – a rather haphazard program, I would say, but the university was fairly young still – and, as the program developed, it became a college and it became a superb college. So, it couldn't have been more different then. It wasn't that there weren't good people, it was that it was the acorn instead of a mighty oak.

Jernstedt: As it is today – certainly, after the Barrett's made their very generous donation. So, going back to philosophy for a moment, you've stated that the study of philosophy can help navigate differences among family, friends, and more broadly, among fellow citizens. With that in mind, how do you think the principles of philosophy can be applied to create better dialogue, particularly here on university campuses?

Creath: Well, one of the things that one has to begin with is the idea that there are alternative perspectives. It's not simply that I'm right and other people are wrong – though that's true, of course. [*laughter*] But that there are other perspectives that can sometimes help to solve problems that I might have difficulty solving, or by looking at it in a different way, offers possibilities that I hadn't seen. So, the first

thing is to recognize that there are alternatives – and that’s one of the things that I’ve tried to teach in my Introduction to Philosophy courses, is that there are genuinely different perspectives, and that in a way philosophy is the study of some of those. Where the perspectives differ, in very fundamental ways, approaching morality, knowledge, the world in general.

And second, those alternative perspectives can be understood. It’s not as though, when someone starts from different assumptions than mine, that, well, the only thing I can do is try to map what he or she says into my own language, and sure enough, they turn out to be thinking just like me. No, we can understand them in their differences, and we can begin to evaluate them. Now, these different perspectives are, in a way, different modes or methods or approaches to evaluation, to be sure, but I can understand what someone else’s mode of evaluation is, and why that person says something rather different, it sounds contradictory to what I might be inclined to say. And that’s a skill we have to use in science, it’s a skill we have to use in philosophy, because some of the apparent disagreements that we face are not real disagreements at all, but differences in ways of speaking. Now, but there are real differences, and insofar as our coordinated action depends on it, we need to find out what other people are thinking, how they’re going to understand what I say. I think it can be done.

Now, this is a controversial claim – bizarrely to my way of thinking, but nonetheless – that we can understand alternative perspectives and evaluate them, and one of the things that tells us is that there are things that haven’t been thought of by my own thinking yet. It introduces a kind of humility into the enterprise that is, I think, valuable for all sides. So, it happens when a student asks a question, I have to figure out, well what is that question, where is that student coming from, so to speak, and sometimes that requires me to ask another question of the student who’s...raising the issue.

Jernstedt: To get them to articulate their thought process in the classroom.

Creath: Yes, and it’s the same thing in speaking to a spouse or a neighbor or in one’s professional life. The fact is that whether one is going on in philosophy or not, one is going to have to be working with other people who don’t have exactly the same views that you do, who don’t think about the world in exactly the same way that you do, and you’re going to have to be able to understand them. You may be able to persuade them that your approach is a better one, but if you can’t recognize that theirs is different, that is almost a hopeless cause.

And so, there’s kinds of skills, which I don’t know whether they can be taught, but they can be learned. That is to say, we can help students who are inclined to do so, improve their skills at understanding one another, and that doesn’t solve all the world’s problems – nothing by itself will – but it is something that philosophers think about, and I think about, as a professional matter, that I think has enormous relevance for everyday life, for the academy more broadly, for

science, for society, and the like. So, I don't think of philosophy as an irrelevant discipline that's being pursued in an ivory tower.

Matthew: Right, there are a lot of practical applications...

Creath: There are.

Matthew: ...that [people] don't necessarily understand.

Creath: This is not to say that every philosopher needs to work on only practical applications, but they have to understand that the work, however abstract and weird it may seem, nonetheless is connected with that larger world.

Jernstedt: And I want to hold on to what you said about how students can be taught if they have the inclination to do so. Over your long tenure of teaching, have you noticed that inclination has become more common or less common? What trends have you observed as a professor?

Creath: Well, fashions change, social situations change. Students come over the decades with different expectations and anticipations. There have been decades when students wanted to know, okay, how will this affect my net earnings? I think that's a very unfortunate question but still, it is a practical one. And other students come with, they're interested in learning the material and they're not interested in that sort of thing at all, and that has varied over the decades. I hate to make generalizations, including this one, about how the character of one class of students differs from that of previous groups of students, but one notices the change. Some of that, of course, will be the vagaries of who happens to sign up for one's own classes. Some of it will be nearly social fashion of a sort, but it has not gone all in one direction and so there may have been decades in which people wanted to know exactly how much more money they would make by taking your course, which...philosophy may or may not have that kind of outcome – in fact, I'm told that the major that has the highest rate of success in getting their students into medical school is philosophy.

Jernstedt: Is it really? *[Laughter]*

Creath: That's what I'm told. It's a bit misleading, of course, because you have to take all these organic chem...all these courses even to apply...

Jernstedt: It provides a sound foundation.

Creath: Well, it's not so much that it provides a sound foundation, but if you can go all of that *and* major in philosophy, which is often a different set of courses, then you're...you've done something above and beyond what those who take only those courses and try to choose a major that will largely satisfy can do. But I think, also, philosophers can step back, or at least they can be taught to step back,

and ask more interesting questions about what they know as a physician, or what they don't know, or what the evidence is and so on, in a way that benefits them in the long run. So, I'm not suggesting that philosophy doesn't help in those regards – it does – but it's, I think, primarily a matter of being able to do all of that philosophy stuff in addition to the required courses.

Jernstedt: Sure. Continuing along this topic of student interactions, whether they're positive or negative or somewhere in between, you've been a mentor to many students over your tenure here, many of whom have later attested to how formative that relationship was in the career they pursued or going on study to philosophy at graduate level, perhaps – one of whom was actually my philosophy professor at Phoenix College, Eddie Genna...

Creath: Ah.

Jernstedt: ...who taught me for about two years. So, what motivates you to continue working in that capacity as mentor to students?

Creath: There are a lot of motivations, but one of the most satisfying things is, first, to see the lightbulb go off in the first place. When students bloom, it is the most marvelous experience simply to be present, to have a kind of excitement and warmth that, it's very difficult to duplicate. But the second point is perhaps even more important: and that is what do they...what are they thinking, what are they like, what are they feeling, if you like, ten years down the road? Or twenty? The real measure of an education is not whether it gets you your first job...

[brief interruption after a knock at the door]

Creath: Well, the second point, which I think is more important, is how has your teaching affected the student in ten or twenty years? That's the sort of thing that no board of regents wants to pay to study. If they want outcome measures and so on, I think it's not practical to go find out whether an instructor has an impact twenty years later. So, one gets only anecdotal information, like that from Eddie. I've been fortunate to have a number of students for whom the question I've raised, that they've annoyed the student for a very long time – that's a mark of success, but it's also a mark of the university in general. Is there a broader perspective? Do you understand a wider variety of views? Can you assess a wider variety of views, can you apply those skills in everyday life? Sometimes the student doesn't know that he or she's been changed in this way, but that's the real measure of success in this business, and I've been fortunate to have some wonderful students who at least said that they have benefitted from the process.

But I'm sure all of their other instructors have left a mark as well on them, that it isn't one professor's doing and it's just gratifying when it happens.

Jernstedt: Now, two questions, but the first I'll ask is, looking back during your time at Knox College or later on, was there a mentor who particularly modeled mentorship that you now use? How to be an effective mentor? How to be an impactful mentor?

Creath: I've had lots of different mentors over the years. In perhaps...the first one that stands out is the person who got me excited by philosophy of science. Remember, this is a college of 1200 students, but he could get a 125 of them to sign up for a single course – that's more than ten percent of the entire student body in a single course. I found him very exciting, and I began to think about some of the topics he was presenting. I suspect he was not a very good philosopher, but he made these ideas interesting and living for me. He went back before my honors thesis was finished, and it was taken over, the direction of it, by a person in an entirely different field who was kind and gentle and an extremely good critic, and I have tried to follow some of that example as well.

Finally, the various members in my committee especially, in graduate school, but in particular the director of my dissertation board, Wilfrid Sellars, was an extraordinary person, an extraordinary philosopher – I didn't always agree with him, but he had a kind of breadth of vision and systematic approach where all of the issues of philosophy were tied together in ways that was almost breathtaking. His way of lecturing...[lecturing] is hardly the right word, it's a kind of dialogue that was going on through the classes. The first course I had with him, he showed up for class and said, "Okay, what are we going to talk about this semester?" He was prepared on everything, and if you wanted him to teach a specific course on a specific subject, you simply conspired with other people to take the course. [Laughter] And all [said] the same thing on the first day.

Jernstedt: [Laughter] Right. There was majority rule on the topic.

Creath: Yes, yes. But it was a matter of sparring back and forth at a very high level. And I find his kind of intellectual engagement enormously bracing and rewarding, so it's fun.

Jernstedt: So, going back to this concept of education as an ongoing dialogue, one of the most striking things a professor once said to me when I was still thinking about going into teaching myself – and then wisely changed my mind [laughter] – is that just as you're teaching students, you have to retain that capacity to be taught by students, and I think that also goes back to what you were saying about humility in what one knows and what one doesn't know, even if you're in the role of teacher, the role of mentor, the role of student. So, what has been the most striking lesson a student has taught you, whether about teaching or perhaps even about philosophy?

Creath: Well, one tries to be clear in teaching, and one learns every day at every moment how one is not clear. And so, I'm constantly learning from students because they

ask the questions in a different way, they ask me to think about something that I hadn't...I guess I knew, but I didn't think about in quite the way that they've asked the question. So, this is more or less a constant, but there's something more that I get from students and successive generations of them. In a way, it's their incredible optimism, especially at Barrett, that no problem is too big to be tackled, and their enormous goodwill – I'll get back to that in a moment – but also their unwillingness to believe, thank heaven, that academic departments and the administrative apparatus of dividing things into colleges and schools and departments and so on, while that may be necessary for a variety of reasons...they don't see that that matters much – and it doesn't. It's true that the individual professions are the bearers of standards within their profession of philosophy, among philosophers and so on, and it's absolutely essential that it be so. Without that community of criticism, philosophy would not advance.

On the other hand, dividing off the humanities from the sciences, or dividing off one science from another, that's at most an administrative convenience. And students – especially the best of them – understand this from the get-go. They see no reason why they should not have a big, sprawling honors thesis that covers everything from physics to morality. Now, sometimes it's a little bit unwieldy, but it is enormously refreshing that we are not born with the idea that departments matter. For the best of students, that is merely an administrative fact of life to which one pays as little attention as possible. So, I'm enormously grateful for that.

I talked about optimism, I talked about their refusal to admit that there are departmental boundaries, for which I'm grateful, but it's also the case that they are willing to tackle big problems rather than small ones, and they are – or at least in my experience – have been enormously generous, both to me and to one another. I take that this is very important.

I taught the Human Event very early on, and then I taught it again many years later...because certain issues had arisen and I was asked to come back and teach it again, for at least one of the semesters again. By that time, there had been instituted in the honors college a program of peer review. I was not sure at all that it could work – not merely that it would work, but that it could work – and I was proved magnificently wrong by the students, who...now granted, they were being judged on how helpful they were to one another, but they didn't need my coaching as to how to do that, and they were genuinely trying to help one another improve from the point of view from the recipient of the commentary and review. I found this also true in our graduate program here, that's housed within Biology and Society. It's a genuine community in which the students are not competitive, they were...when I was a graduate student at school, the students were fiercely competitive with one another. But here, the attitude is quite different: it's one of mutual helping one another because they're working on different projects, they're going to be judged for what they become, not whether they're better or worse on a ten-point scale or one-hundred-point scale or whatever else. They're going to be

judged on what they're doing and whether they have learned to be helpful. So, that's, I think, one of the important skills that professors can have.

So, in all these respects, I've learned from the students that there is far more willingness to tackle big projects, they are far more optimistic, they are far more skeptical than one supposes about administrative boundaries, and they're far – naturally perhaps – far more cooperative than one has any right to expect.

Jernstedt: As a current student, I'm glad to hear that assessment of our capabilities. [laughter] But that is also an excellent segue way into my next question about the Human Event, and specifically its origins and the role you played. So, the Human Event is very ambitious in that it attempts to encapsulate so much of human knowledge and human endeavor. Can you tell me more about the genesis of it? How did you come to think about designing a course like this, and what support did you receive in designing a course this ambitious?

Creath: Well, the course began before there was a college, and consequently before it was honors...before it was Barrett. I was asked by my chair, Ted Humphrey, to teach this course because a new person – I think it was a new person – had taken over, or Dean Jacob had taken over the leadership of the program. He was a physicist, and he was worried that the sciences and the humanities were pulling too far apart, and there was nothing that was pulling them together. And so, he thought that a history of science program, a history of science course, built around Jacob Bronowski's book *The Ascent of Man* – which was not a very good title and not a very good book, and it has problems of its own. They called it the Human Event because they thought that that title was copyrighted – now, you can't copyright titles of books, but that's another matter. At any rate, they thought that there should be some...it was, the book was the product of or became a big, glossy PBS series of things in which he would go to various places and say, "On this spot, mathematics was invented." [Laughter] Which of course was nonsense.

Jernstedt: Right.

Creath: At any rate, I said, "Now, I was told to do the history of science from the beginning to today – Plato to NATO, as they say." [Laughter] And I was one of the few people on the campus who had any type of graduate training in history of science. I have a master's – besides my work in philosophy, I have a master's in history of philosophy of science. My doctoral work is very close to it, and it turns out that I do history for a variety of reasons. My methods in philosophy are historical ones. At any rate, I was asked to do this. I, at the same time, received a grant to go back to my graduate institution and do some archival work to get a big archive that's still going on the way. And so, it's entirely possible that I was not the first person to teach the course. Although I was one of the people, maybe even the first person to be asked to teach it, I had to delay for a year.

Well, I used the book that I was told to use and discovered that it was not very useful. But I thought, no matter, I just taught a course in all this, trying to put together just some sort of sequential narrative in which the episodes hang together, and the first semester up to or through Newton and the second one emphasizing much more the chemical revolution and the Darwinian revolution and so on. So, I taught that for a couple years and it was, by and large, a success. We had some outstanding students – one, I remember, that seemed to have almost total recall. That is to say, I asked a question, and the answer that would come back on the exam was almost verbatim what I had said.

Jernstedt: Could you clarify, when did you stop teaching the Human Event?

Creath: I taught it for several years, and so I must have...I think I was here for three years before I went away, and I was away for one year and taught it the next and for the next several years. But the idea was, yes, I would be willing to teach this course, and there was not an honors college, but I didn't want that to be all I did, because I was interested primarily in philosophy of science and my philosophy work, and tenure requires work in my department and so on. We taught rather a lot when I first came, but nonetheless my research was related to this and I thoroughly enjoyed teaching that course.

Now, as the years passed, the nature of the course reflected more nearly those who were teaching it, and they were by and large not trained in history of science; that no longer became the central thread of it.

Jernstedt: So, it has deviated from that original goal over time?

Creath: Yes, and for all I know the other people who were teaching it from the outset were given a different brief, because they were not in the philosophy department, and I met them only very briefly. At any rate, as things changed over the years, it was found that, once again, the Human Event no longer met the needs of people who were in science or engineering because there was no scientific content in it anymore. It was more nearly Western [civilization] or history of science, and a very heavy emphasis on literature – which is fine, I'm not quarreling with that at all, but especially the second semester, from the Renaissance on, well, it in a way dominated...intellectual matters are dominated in a way by science, and that's not to take away from the magnificent art and music and all that sort of stuff that was going on at the same time. So, I was asked to come back. They had very few people with scientific training on the honors faculty at that time – they had some, but not very many. They began hiring more, but in the interim, they wanted...they were trying to construct three flavors of the second semester: a humanities version, a natural science version, and a social science version. I was asked to do the natural science version – odd in a way that the person, one of the people, chosen for the natural science version was someone who was squarely in the humanities, but it was never thought that, in doing so, I would be giving just the Reader's Digest version of physics or something of that sort, but rather connected

with the wider culture and to see the broad threads that connect the decades and centuries that make up the scientific enterprise. And so I was given *carte blanche*, but it was supposed to be a natural science version, and I made up something that still strikes me as audacious: I began with the Copernican revolution, and talked about physics and astronomy and how the wrenching changes that happened in the Renaissance were, in part, a product of a great deal of prior work but had to be understood in the context of their time, and the development of perspective...I mean this literally, in the geometric sense of perspective, and how that's done differently in Italy than it is in Northern Europe in painting. Even questions about the non-Euclideanness of the spaces people were developing. And so, I tried to connect that with the broader political, religious, social, artistic climate of that time, and that would be the first third of the course.

And the second was on a later period, the Enlightenment. We talked about music and art and architecture and politics, because the people, for example, who founded the U.S. thought that they were engaged in an experiment, and that they were going to be governing rationally, and that the way they set up the government was not some Romantic dream – Romanticism hadn't started yet...

[interrupted by a knock at the door]

Creath: So, I had them watching operas, I had them reading novels, I had them thinking about how science and the development of late eighteenth-century democratic ideals are interwoven. Almost all of the Founders of the century started, not merely as members, but started scientific societies in their individual states. I had them look at *The Marriage of Figaro* – Mozart – the libretto was written by a terrorist. How was he a terrorist? He was sending guns to the U.S. to fight the American Revolution. The whole plot of the thing is about a clash between the rising middle class and the traditional count who thinks that he has rights that we don't think he should have. At any rate, it's thinking about these things in a different way, but I was also interested in the architecture and Jefferson's work and all that sort of stuff, and then I moved into a twentieth-century reprise of the Enlightenment, and I began a little bit earlier than that with the rise of non-Euclidean geometries and how those develop, and how you think about philosophy and its relation to politics and so on. But how the changing scientific scheme of relativity and so on, with its underlying non-Euclidean geometry, developed and so...the theme in each of these is the relation between science and philosophy and the wider community, and it's one of the most exciting things I've ever done, is to teach that course.

Now, my guess is that the idea – and you can tell me better than I – my suspicion is that they're no longer aiming at having three different flavors of the second semester of the Human Event; that's fine. But to have it rely on having a body of instructors that come from different backgrounds, so that there will be some who can meet the needs of those students who come from science and engineering backgrounds – again, you might have noticed – undoubtedly you did – that even

in that course, I'm trying to break down the boundaries that had been put up, of necessity, by well-meaning administrators, dividing the world into the humanities, the sciences, and the academic world from the political world and so on.

Jernstedt: And if nothing else, I think the course has retained that wonderful interdisciplinary quality. Trying to merge the sciences and the humanities and show the interrelations that exist between them.

Creath: As long as it's interdisciplinary rather than merely undisciplined. [Laughter]

Jernstedt: As a transfer student, I actually took a modified version, specifically for upper-division students. Mine was taught by Dr. Michael Stanford, and as a former defense attorney he taught quite extensively on poetry and the law, so we read *Measure for Measure* by Shakespeare, we read *Snow Falling on Cedars* to more comprehensively understand the Japanese-American experience of the legal system. So, like you were saying, each individual Human Event Course is very much molded by the proclivities of the professor who's teaching it. It could be about Japanese literature, the law, more poetry, more physics, more science. And that can be exciting, because you don't know exactly what you're going to get, but it could lead to that lack of discipline that you were talking about.

Creath: It's terrifying, too, by the way.

Jernstedt: It is. [Laughter]

Creath: Both teaching it and taking it as well. But it was among the most rewarding things that I've done, and I very much value that.

Jernstedt: That was an excellent history. Thank you for sharing that. So, to briefly move away toward something else – and this is more of a sweeping, I guess broader narrative of the honors college – how have you seen honors education at Barrett change from when you first came here, when it was very much an afterthought, as we were saying, to this very extensive program that is the model for honors colleges all throughout America? In Europe even, there are a lot of colleges that look at what we're doing here at Barrett. So, how have you seen that broader arc of the progress of the honors college here?

Creath: It's bigger. [Laughter] It's better. The students are better. A program that is actively recruiting students and actively recruiting a wide variety of students has enriched that program enormously. It's been well supported by the senior administration, it's had the advantage of wonderful administrators within the college, but somehow it has caught on to what I think the students believed all along: there's nothing that couldn't be done if only we had the audacity to try it. And so, the college itself, and to a certain extent the university as a whole but the college in particular, has the same kind of optimism, the willingness to tackle big things – the willingness to disregard disciplinary boundaries, the willingness to

connect what one does in an intellectual way with the broader needs of the society and the community in which we live – it's that that's made it a great institution. They say insanity is hereditary – you get it from your children – in a way, these wonderful features are features that the college has, if anything, gotten from its students. One likes to think that the flow of information goes from us, the professors, to the students, but in fact the character of the place, as encouraged as it may be by those of us who are teaching, but the real character of the place comes from the character of the students that are in it. And for that I will always be grateful.

Jernstedt: So, two more questions, and the first question is continuing along this idea of the students of Barrett. Can you tell me more specifically about honors thesis that you have overseen, and second to that, what is the value of requiring undergraduate students in philosophy – or, for that matter, any field of study – to complete such an undertaking? Not all honors colleges require students to put this much effort into something so rigorous and so challenging for its students.

Creath: Well, I hate to generalize about the character of thesis and how that's changed, but it has become a central feature and we've tried to have it insofar as we can with resources we've got over here, even for non-honors students. It is extraordinary valuable, it allows one to do something original, which most classes don't – I mean, you can have the stray original thought, but to do something original, and to work on it with any depth, is difficult under the best of circumstances. What the thesis allows you to do is to learn how to take a big, shaggy idea and mold it into a shape that you can address. How do you turn a question or a worry into a researchable problem? And then, how do you organize, begin to organize, that research and to carry it out?

One of the best things that ever happened to me was writing an honors thesis, because when I went off to my graduate work, I had already done original work.

Jernstedt: And what was the topic of your honors thesis?

Creath: It had to do with meaning change in the sciences, and I didn't realize it, but that would become a permanent thread of my work thereafter.

Jernstedt: And the chair of your thesis, their name was...?

Creath: My undergraduate thesis?

Jernstedt: Your undergraduate.

Creath: Officially it was Ken Pale, Kenneth Pale, who was an ethicist, who really didn't know much science, but I was helped by people who were in the sciences. The dean of the college was a Rhodes Scholar in physics who said, "Oh, don't bother with the lab courses. Come into my office and we'll talk about relativity", and so I

would come into this office – the dean of the whole college, the whole institution, and we would talk about relativity, physics, and how you could do various things. And I began to understand, in a way, that I probably wouldn't have if he hadn't taken me more or less by the scruff of the neck and said, "Okay, come in here, we'll deal with it."

So, I had access to faculty in a way that most, well, most of the other people who had gone to graduate school with me didn't. If they had come from fancy institutions, many of them, and they had been allowed to talk primarily with TAs, and they had letters from impressive people undoubtedly, but I had done something. I had worried a problem though, and it was, I'm sure, quite idiosyncratic, very weird, and very strange, and I'm not sure would've been recognized as professional and all that sort of stuff [*laughter*], but I had worked it through, and in philosophy that's an enormous advantage to have done this. It gives you the sense that, hm, maybe I can do it again, and so my, I had that advantage – I was scared to death in graduate school – but I had that advantage that I had done something and carried it through, and the depth and originality of an honors thesis at Barrett is more than enough reason. These don't have to be deathless works of literature; they have to help the student grow and to convince the student that, yeah, I can do this, and I can do it again and I can do it better.

If the student learns nothing else in the process of writing a thesis – I'm talking about whether it's a Barrett honors thesis or one of the Capstone papers that's more than just a term paper in any other field – it's an enormously valuable experience. We have graduate courses in how to develop a prospectus, how to think about managing your research and so on. There was no such thing for me in graduate school, there was no such thing for me as an undergraduate. I had to sort of pick it up on my own, and having a set of willing, able mentors to guide that process – and they'll each bring different skills to bear on it, just as the student will, but having a project that's ambitious is an enormous benefit, whether they go on in the field or not. In many cases, I know students are going into entirely different fields than what they're doing, but they're asking an interesting question and they're providing an interesting answer, and that answer is going to be problematic in various ways and they will have, if properly mentored, had their feet held to the fire. [*Laughter*] Until they recognize that there are problems and cope with them as best they can, and that is an absolutely invaluable experience. That is perhaps the most relevant thing that happens in a university: taking courses, taking the exams, looking at the answers at the back of the book and then going and learning to write proper answers that answer the question and so on – those are all valuable skills and you get a lot of information and so on, but that's not what's going to happen in life. Whether you go in as an academic or not, whatever questions there are – and there are many – life does not come with answers at the back of the book. It requires you to say, okay, what's the problem and how can we deal with it?

You're going to have to be able to see that there are alternatives, you're going to have to be able to weigh them and you're going then have to persuade people with different perspectives that this way of weighing the alternatives is the best we can do. That's called research. That's what you learn to do in an honors thesis: you ask an interesting question to which you have at least not yet found the answer, you try to see what some of the alternatives for answering that question are – in that case, looking at literature or what other people have done is enormously valuable – but if it by itself answers the question, then your question wasn't very interesting in the first place. [Laughter] Certainly wasn't very original. And so, you begin to weigh the evidence that you're given, weigh the alternatives that are before you, and then to persuade the reader that this is a good way of thinking about the problem. That's the most practical thing I can think of.

Jernstedt: Right. It doesn't have to be profound.

Creath: Right. It doesn't have to answer all the questions of the universe. It has to answer *one* of them, preferably an interesting question. But that's what life is going to demand of you, that's what family life is going to demand of you, that's what living in a community is going to demand of you, that's what being at work – regardless of what your work is – is going to demand of you. And it's an enormously valuable skill, and you can't start too soon or practice too often.

Jernstedt: That's applicable to all these different aspects of life.

Creath: Yes!

Jernstedt: That's a great way of looking at it.

Creath: And that's why professors doing research themselves, it's absolutely essential for their teaching, as you wouldn't want to hire a guide who's never been through the territory, who's never tried to organize *terra incognita* into some sort of intelligible something or other. Who hasn't learned how to map the territory. And so, that's the skill we want to communicate, and that's the skill that professors need to bring to bear. And that's what research is – it's not the particular news of that research that's important, it's the having organized or having mapped *terra incognita* that's a valuable skill we need to teach.

Jernstedt: So, for my final question...well, first of all, you've been enormously generous in sharing your knowledge of Barrett and Arizona State University, so thank you for that. So, for my final question of you, I'd like to simply invite you to think toward the future and thinking toward the future, what do you hope that your legacy will be, your legacy, for students who come to Barrett or come to ASU, ten, twenty years from now – generations from now – and study philosophy? When they think of your contributions, what would you like them to think about?

Creath: Some of the things we've talked on already, but I would like them to be able to see that there are different perspectives, different points of view, even at a very basic level. And that it's – I think the assumptions that one brings to bear, the perspective and so on, this is not a matter of truth or falsity, it's a matter of how well they work as a practical matter, how they allow us to navigate around the problems. I'd like to have students have a kind of appropriate modesty about the ambitions of philosophy. It may be that philosophers once thought that they could answer all of the questions of the universe – I don't think they can – and so I would like to see them appropriately modest, and that's not to say wringing their hands, but appropriately modest and appropriately ambitious as well. I want to see [philosophers] attack the big questions and the questions that have tentacles that go out all over the place. I'd like to see them be appropriately skeptical about the latest fashions, philosophical fashions, intellectual fashions more generally, even old fashions. I mean, I work on two characters from the mid and late-twentieth century [Rudolf Carnap and W.V. Quine], but if I thought that they'd answered all the questions of the universe, I think I would be making a dreadful mistake. To think that some philosopher, however new or late, has the answers to all the questions is, I think, a problem.

We tend to have this problem in philosophy in particular, perhaps, about the latest fashions in philosophy, in part, because there isn't the kind of hard evidence that we're forced to wrestle with in the way that physics or chemistry or biology or psychology might be. So, I'd like to see a certain amount of skepticism about whatever it is that's popular these days. Maybe it's just that I'm a contrarian. [Laughter] Maybe I just, tell me to do something, I do the opposite – maybe that goes with the territory of philosophy, I don't know. But I'd also like to see philosophers, rather than knowing more and more about less and less, be willing to connect what they do with broad intellectual interests and broad political and social and other community interests.

That is to say, connect up with science. I don't think that you have to be a philosopher of science to think of it that way. *What* do we know? How do we know seems to be a pretty basic philosophical question or collection of questions. What's knowledge in history like? What's knowledge in art history or psychology? What's knowledge in ordinary life? How does that then connect up with the other dimensions of our lives – the aesthetic ones? Art – over the last few days, I've had the chance to go to the National Gallery in Washington [D.C.], and to several other art galleries. I find it ever a source of enlightenment, and to try and think about connecting my work with the broad themes of human endeavor that are represented there. But there are so many aspects of life outside of philosophy – I think it's important not only to try to integrate all the various philosophical issues but integrate them into a larger picture of our place in the world. So, those are a lot of ambitions that I'd like. If I can make a small contribution to that, move us an inch or, perhaps more scientifically, a millimeter in that direction, I would figure that it's a career well spent.

Jernstedt: Well, that is an excellent place to stop. Thank you, Professor Creath, for your participation. If you have any more thoughts to share later, please feel free to reach out. If you have any questions regarding this interview or the 30th Anniversary Oral History Project, please contact Vice Dean Nicola Foote. Thank you.

Creath: Thank you.