

## **Episode 52 - Dr. John Bricout: Technology as a Social Force in Assisting Persons with Disabilities' Employment and Community Participation**

[00:00:08] Welcome to LIVING PROOF. A podcast series of the University at Buffalo School of Social Work at [www.socialwork.buffalo.edu](http://www.socialwork.buffalo.edu). We're glad you could join us today. The series Living Proof examines social work research and practice that makes a difference in people's lives. The University at Buffalo School of Social Work is making a difference every day through the generation and transmission of knowledge promotion of social justice and service to humanity. We offer MSW and Ph.D. programs continuing education programs and credits online courses licensure exam preparation professional seminars and certificates and much much more. To learn more about the school of social work please visit [www.socialwork.buffalo.edu](http://www.socialwork.buffalo.edu). Greetings from Buffalo New York the home of 80 degree summer days and low humidity. I'm your host Peter Sobota. So what is normal anymore. In this episode Dr. John Bricout discusses his work and the powerful impact he believes that technology is and will continue to have on disabled client populations and the implications for the social workers who work with them. He discusses his evolving interest in technology and the social force that technology has in not only assisting disabled clients but the enhancement of their functioning. Dr Bricout talks about his work and how he believes technology is challenging both the disabled individuals and others in the communities. Social constructions of disabled persons. He comments about just what constitutes normal anymore as a result of these technologies. Dr. Bricout describes what he believes these developments mean in terms of social practice and why it's important that traditionally technology averse social workers become technologically proficient.

[00:02:13] He concludes his conversation by describing the opportunities that social workers have in this area for advocacy research. Interdisciplinary work and how technology can shift perceptions of Disabled Persons in communities. Finally he comments on the future of technology in social work practice and research. Dr. John Bricout who is associate dean for research and community outreach at the University of Texas at Arlington School of Social Work. Previously he held appointment as Associate Professor and Associate Director for Research at the University of Central Florida School of Social Work. Dr. Bricout studies the influence of information communication and assistive technologies on employment and community participation for persons with a disability. By the way we are proud to mention that Dr. Bricout received his MSW from the School of Social Work here at the University at Buffalo Dr. Bricout was interviewed by Dr. Barbara Rittner associate professor director of the Ph.D. program and associate dean for external affairs at the University of Buffalo School of Social Work. Dr. Bricout was interviewed by telephone. This is Barbara Rittner and I'm going to be talking with Dr. John Bricout who completed his MSW at the University at Buffalo my very first academic year at UB. And I got to tell most people listening to this that at the time I was pretty sure I was going to be following your career John because even then you're a star as I remember following your doctorate from Virginia Commonwealth University you've got a postdoc award from the National Institute on Disability and Rehabilitation Research. Is that correct. That's correct yes. And is that when you got interested in technology or did it evolve after that. Actually it's been a lifelong interest of mine.

[00:04:08] But definitely I saw my mentor in my postdoc and I had a doc with them as well my mentor in that environment was very technologically minded and this was back in 1997 through 1999. To those two years and so he was using personal digital assistants PDA for the individuals with severe intellectual disability who whom he was placing them in various worksite way back then. So he really raised my sights in terms of what technology could do to help people with cognitive disabilities for example. In addition I've just had a longstanding interest in the interaction between society and technology. In fact you and I have talked a little bit. It's clear to me that you

see technology as a social force. And I find your kind of thinking about this very interesting. So I'm sure our listeners would love to hear some of your thinking about technology as a social force. Well thank you. I think technology is a social force because it alters our expectations of ourselves and of others. And fundamentally that makes a big difference with technology and by technology I'm speaking of what used to be called advanced technology or high technology technology particularly that links us across vast distances on the one hand and technology that gives us enhanced abilities on the other hand whether the enhanced abilities are things like being able to compute something very quickly or being able to remember things one otherwise wouldn't be able to do or to locate oneself to your specialty the kind of GISS kinds of systems that are in cars.

[00:05:43] Now technology really is about the way in which we interact with ourselves and with others and it changes how we view ourselves and our relationships to others. So partly what it sounds to me like you're talking about is that we go from having a kind of parochial local identity to begin to use technology as a way of having a more global connection like global and also temporal to an interesting thing that I'm sure many of us have experienced with Facebook for example. At the risk of promoting them yet again after they made the front cover of TIME magazine is that one finds oneself with the social media in particular which Facebook is one example perhaps the best example is reconnecting with people from our lives over the years when we really have not spoken to our contact for a long time. So it's spatial but it's also temporal to it has the ability to help us reach back in time so to speak to rekindle old relationships. So that's some other aspect of it. In fact one of the things that you have considered it seems to me and that's particularly interesting is that you know we talk about level playing field and you give us an example the fact that technologies whether it's Facebook or something else but technologies have a tendency not only to level the playing field but to enhance the playing field. And one of the examples that you've given is somebody who is a runner with prosthesis the runner with prosthesis was a very interesting case particularly for those of us doing research in the disability area and people I'm sure who practice in the disability area as well and primarily people with disabilities themselves because this runner was a world class runner. He had two prostheses.

[00:07:24] He did not have his original limbs and he was able to run very fast. In fact he was able to achieve better times than runners with their own limbs. And so there was some controversy about whether or not he should be able to participate in a competition because he had quote unquote an unfair advantage. Well the irony in this is tremendous from a disability standpoint because this gentleman actually had a disability. On the other hand he had the enhanced performance through the what we would call him the disability field the technology the technology of the prosthesis that enabled him to not only compensate for not having limbs but actually exceed what the limbs themselves might have been able to perform under those circumstances. Ultimately he was allowed to run which was a great victory I think but it also underscored this issue and the other piece of related to that which I mentioned in the piece that I wrote was that it also helps alter our view of things like disability for example some of those social constructions that we have floating around in our and so that someone with a quote unquote disability could actually surpass the norms in terms of behavior and performance with the use of assistive technology it really ends up being quite a mind bender for society. So part of your social forces really is that it helps us to reconceptualized what the normative behavior spectrum is that is in this case this guy unlike Bruce Jenner with feet don't fail me now has in fact become a top notch athlete because of the prosthesis. Yes he has it. In fact this issue of raising the baseline of human performance has not been lost upon Funder's for example.

[00:09:07] So for example when I write grant proposals to the National Science Foundation that have to do with for example robotics for people with disabilities. I have collaborators in engineering and computer science who are experts in that area. One of the points we tried to make was that there are broader applications for enhancing human performance through the assistive robotics and what

we learned from them. So it definitely opens up a window for the enhancement of human performance and altering human behavior as a whole. And rather than sort of being specialized and partial out so that on the one hand there are advancements that benefit only people with disabilities. The tendency now is to see how those are very much connected to enhancements for people in general population and vice versa. So I'd like to go back to something you brought up which I thought was really interesting which is it seems to me that we're going to have to start redefining how we see disability. Yes absolutely and how we see normalcy whatever that is we're going to have to start seeing disability in terms of perhaps people's perceptions of what is a baseline performance rather than get some sort of preexisting standard. So for example let's take eyeglasses which I happen to wear for example. We long ago ceased to look at vision unaided as a baseline performance variable unless you're talking about pilots for example they do have to have a vision that falls within a certain range. But for most of us that's not even an issue. So we no longer really to worry.

[00:10:38] For example when we take driving test whether we have 20/20 vision or vision as we are viewed as nondisabled and fully able to operate a motor vehicle as long as with the aid of the glasses we're able to operate within the parameters. And I think that this will be the same overall as people with disabilities across different domains are able to achieve the kinds of performances that the general population has met and perhaps even exceed those and that will change people's ideas of what disability is. Because the enhancements over time will become normative just as we don't think of glasses now as an enhancement for people who have visual disability or impairment but you know still inherent in this is access to these things which of course is always a social work concern and sometimes it's more difficult to get access to especially high end stuff. And I really think that that brings us a little bit back to our domain which is what do you think this means for practitioners as we start thinking about disabilities and technology. How do we as practitioners and promoters of clients rights and needs need to think about this stuff. I'd like to make the case that I'm a strong believer that there's a notion that was put out by I believe he was a scholar in public administration Donald Shin that practitioners in the helping field really ought to be create kind of a reflective practice around their work that is that they should reflect deeply upon not only what they do its practitioners but how they do it.

[00:12:12] And he saw that as an antidote or countervailing force against the tendency for practitioners in a variety of domains to become more and more technocratic so that rather than the social worker for example simply being a technician doing what is laid out for him or her in terms of an evidence based practice guideline or best practice that they would add to this the perspective and the wisdom that they could bring from the field and from their practice and integrate that with the scientific evidence in this kind of reflective practice. And my thought is that this reflective practice ought to incorporate a keen awareness of technology and the role of technology in the lives of people that we serve in social work people who belong to vulnerable oppressed or disadvantaged groups because in fact with technology washing over if you will every aspect of social life we need to be aware of the fact that the consumers and clients that we work with are those who are to attempt to find themselves on the other side of what in the information technology world is known as the digital divide where they don't as you point out actually have access to those bodies of knowledge to those bodies of actually connections I should say to some of the more important social and public goods and at its base I think for the most work practitioner is an awareness that we need to think about the way in which disadvantage vulnerable and oppressed populations have generally less access to not just those things that technology leads to but also knowing how to use them. In other words the issue may be computer literacy the issue may be Web literacy.

[00:13:49] The issue is not just getting to them and knowing how to get to those resources but then knowing how to use them and that's heavily confounded with the fact that for example in my domain of expertise disability domain people with disabilities tend to have a significantly lower

level of education than the population as a whole. So I think social workers need to be aware of this and to make this part of their practice well. But I also think you bring up an interesting issue for us as practitioners whether it's in social work or the other areas. How do I know if I'm working with somebody who has a physical disability. What resources might be available to this person. I think most of us tend to work in our little pods and we sometimes forget that there's a whole realm of information out there particularly if it's not a disability that I've ever encountered before and I'm dealing with clients who is frustrated and and limited by this disability but I don't really know how to go about getting that information. I'm not sure it's just clients who are illiterate I'm sometimes quite convinced some of us are illiterate about how to get the information. That's an excellent point and the first my first thought is to turn to the consumers themselves because they've had to problem solve this. The likelihood is that they themselves have figured out who to go to or they know someone who could help them go to that particular source. The other piece is to become more involved with advocacy organizations that are working with these populations that are familiar with some of the issues for example with people with disabilities generally Centers for Independent Living which are found pretty much everywhere in the country. There are over 365 of them are able to help guide the social worker and help them with referrals.

[00:15:33] But we really shouldn't underestimate the wealth of knowledge that consumers themselves possess that we just may not be tapping into that may at least get us started in our journey. The other piece is to I do believe strongly that schools of social work should highlight the importance of technology much more than they do right now. And in fact also I think because some of our allied health professional friends had actually done this to use technology more ourselves. I was referring to digital assistants for example for social workers to use them more and more in their fields of practice as data gathering tools as tools for writing down progress notes as ways of linking with other social workers. I think if we also became more savvy as a profession and in the use of technology and used it more I think we would also become more aware of resources for others. And I think that really brings us to a kind of critical point that you often bring up which is this issue that this is more pragmatic than theoretical that is these are really important pragmatic components of being an effective practitioner. And it seems to me that we also run into some of the regulatory issues that come up. That is who has access to what what kinds of stuff are maintained on people how we can think about these things as practitioners. Right. So the pragmatic pieces definitely perhaps. I think it's foremost in my mind that there are practical issues that need to be problem solved at this point.

[00:17:05] I think it's unfortunate that technologists here by referring to a whole slew of individuals for example people engineers computer scientists informatics folks are really working very hard on these issues of of making technology accessible and useful for example for people with disabilities and no doubt for other populations as well. In fact I'm quite sure that this is being done for example with older people for example to help compensate for dementia or spatial deficits so people can find their way back home and so forth. So these things are really being worked on now I think primarily by technologists. I think that it would be really helpful for social workers to get involved in some of these pragmatic issues because social workers would bring the lens of the person in the environment rather than thinking about simply fitting something for an individual which to my experience having attended many technology conferences tends to be the perspective of the technologists to think about the social dimensions of it and the group dimensions and the community dimensions of it. The regulatory piece is really a critical piece to this because I would say that from my experience again this is just anecdotal personal experience. Manufacturers of technology various types of technology particularly information technology but also assistive technology and more hardware oriented rather than software application technology are very interested in serving populations that are disadvantaged populations because they see some market benefits not only in reaching out to the longtail the smaller group of individuals have unique needs or a large group of individual have little means to pay for things but also thinking about how they can then crosswalk those things into the

general population and really make it commercially viable.

[00:18:53] That's fine and that's good for the market force definitely needs to be there but there often needs to be a regulatory piece as well because the market tends to discrete identified needs whereas the regulators are thinking about the overall needs. And so for example a number of federal entities have become involved in some of these issues and I think social workers perhaps need to work with some of these federal entities for example the FAA is I'm sorry the Federal Communications entity is one that FCC may be one that social workers have not thought about lobbying and yet it's very important for people with a variety of different disabilities. And also in the general population of people who are disadvantaged may have their interests very much tied up in the kinds of regulations that the FCC deals with. Well in fact bringing in fact to your ideas about the service that we need to provide to people with disabilities one of the things I'm always interested in is when you set up a new Web account of any sort. They always have this very complicated entry code that you have to put in that has a word like magic using upper and lower cases in unpredictable places with the number in the middle of it which is all swell and good as long as you don't have a visual disability. But those are simply unreadable. And so it seems to me that part of what you're also talking about is making sure that both the marketing groups understand the barriers that they put in place for people with disabilities but also the FCC's endorsement of those barriers in some ways by not challenging them. Right exactly.

[00:20:25] And I think that the FCC may endorse them by not challenging them not out of bad intentions but because people with disabilities and consumers generally have not been involved in the design of these products. And I think that that's really a critical piece where those two were can really play a role is to advocate for and provide avenues for consumers to be more involved in the design of the things that really impact them directly. I mean one way in which we've done this sort of at the other end traditionally has been through for example boycotts and boycotts are a way of capturing the attention of a manufacturer or of a provider of some kind. But what about at the other end what about design hand actually trying to grab people's attention at that. And I think that would be quite effective. And in fact it seems to me that one of the things that we need to understand is that by and large while this is being very largely used by the population at large both disabled and nondisabled populations there's very little research on either how this stuff is being used or even research on how effective it is. And I'm wondering thinking about this which I know you have. How do you think researchers ought to approach the issues of technology as part of their research not just to research it directly but in thinking about how to go about doing effective research that includes issues around technology.

[00:21:49] I think you really pointed to it in your question which is that researchers need to be focused and mindful of the larger social issues at play and the larger social dynamics I spoke earlier about the digital divide the dynamics in the macrocosm of our society that has led to an increasing gulf between the haves and have nots that the same kinds of dynamics need to be addressed in terms of the development of new technology and research into how technology is diffused and strategies for using technology. That is the researcher rather than again. I don't I do not mean to denigrate focusing on individual adaptations and doing good research that helps us understand how individuals can best be served by technology. But I think what is often overlooked is the social aspect of it. So what is the impact of a given technology on an entire community. What is the impact of a given technology designed one way as opposed to another way for the well-being of a group. What is the impact in terms of the kinds of social dynamics that could lead to an increasingly divided society. To help bridge those gaps. Yeah and it seems to me that part of what we also need to think about sort of bringing it down from that altitude of 10000 back to more of it at ground level it seems to me the flip of that is also possible which is that it used to be that we use face to face or maybe telephones as ways of doing research but I assume that there are ways that we could in fact incorporate technology into our research protocols that would allow us to capture the kind of

information that we're interested in. And the thing that I think about when I consider this is you know you can go to a physician and have an EKG and he can tell how or she can tell how your heart is functioning at that exact moment.

[00:23:39] But for years now they've used something called a holter monitor where they'll attach somebody to basically an EKG that runs for about 24 hours and then they can see how it works. You know how you're functioning when you're asleep and awake and under stress or not under stress because you journaling it seems to me that that kind of technology must have some adaptation and are getting sort of snapshots of real life experiences in people. But this is sort of the dirt level but I haven't thought it through probably as well as you have. Well I appreciate the compliment in that the fact is that in terms of my own thinking and work and I think I could speak pretty much generally based on what I've read the literature that we're still in early days in what you're suggesting that is in terms of coming up with some really good metrics by which we could look at the evolution let's say of a social technology. Let's take for example social media you know how are they impacting disadvantaged populations over time. I think we're still in early days in terms of figuring out what is it that we really ought to attend to. I mean what shouldn't what kind of data should we be gathering. The other piece is that these platforms and this whole landscape is a very dynamic and fluid one that's changing all the time. So unlike for example the heart which is an organ which needs to operate within certain parameters that are well defined and has certain well-defined goals. It's really not clear what the goal is for example of the social media that exists. Now what what are the goals for example of blogs generally or blogs specifically with a collaborator who is an expert in technology and policy at Georgia Tech.

[00:25:20] He and I did some research looking at some blogs that were written by people with disabilities. We did some content analysis and we found that was very difficult to really get our arms around what was the gist of what was being said in those blogs. And what direction would it point to in terms of how social policy should be more responsive to people with disabilities themselves for example who are blogging and trying to get their voice out there and having it heard. Because there was such a diverse group of people and it was really difficult to really pull them together to any sort of discernible pattern. By the same token when you think about the medium that is the medium of electronic technology it should be possible once we're able to figure out what we need to pay attention to to be able to mine the data and to see patterns that make sense. But I guess it seems to me anyway this is my view and it would be interesting. I've never really looked into this in any depth but it's my view that we don't really have a good sense of what metrics we ought to be attending to and what kinds of indicators we might point to. So in a way we're back to some of the stuff that the social psychologists have taught us which is that we're in a period of observational research, it's very hard to figure out how to measure something you don't have any real feel for what it's about.

[00:26:35] And so it seems to me that part of what you're saying that as practitioners and as researchers there is a period of time where we need to really think about these things and partly by just engaging in some observational research what you know what do we see is happening and how can we think about it. And what are the impacts. And I certainly understand this for a number of years ago, I got particularly interested in online support groups and found that depending on the topic you know if you enter something like A.D.H.D you'll find that there are all kinds of online support groups out there and there are a number of platforms and some of them are monitored and some of them are not monitored. So it's a pretty complicated world out there. But the reality is that's where an awful lot of stuff is happening and it's legitimately at this point worthy of research. It sounds to me like you and I are on the same page which is that we haven't figured out how to do it yet. The methodological issues are still in the formative stage right. I think that's a very nice observation. In fact as you were speaking I was thinking that you were referring to naturalistic observations so I thought about the roots of anthropology might be relevant here when you think

about both. One of the founders of anthropology that turning to key informants is really critical in anthropologists and in their fence making trying to make some sense of what are these these cultures these amorphous kinds of things that we're trying to understand in their own terms or on their own terms.

[00:28:04] And so perhaps that's where we're at in terms of our work as well that we really do need to make these naturalistic observations and we need to also share those with the perceptions and the perspective of the people who are most involved in from that perhaps we will be able to derive our metrics and indicators about what what is important and what we really need to attend to. Yeah and I think that also there's some very interesting ethical issues that kind of begin to bubble up in all of this what is the legal concept is everything. That for instance is happening on the web is fundamentally public domain. It's no different than going into a mall and counting how many dads on Saturday afternoon are pushing strollers. You don't technically need their permission to do that. The differences were not overhearing their conversations or watching their keystrokes or paying attention to the kind of web information that they're seeking. And so it seems to me the other and social workers are always interested in the ethics of things. It seems to me that what we're also beginning to move into is some pretty fuzzy ethical domains here. Absolutely. You mentioned people in trollers and it made me think about where those trollers going where are the data going. This is something that is of critical importance.

[00:29:24] One of the points that's been made by people writing in the realm of technology and society is that what is truly revolutionary about the Internet for example is that these bundles of information go and all kinds of directions almost without any human direction that is there are a variety of directions that they may go in response to queries that ultimately you can't predict and it's very difficult to nail down all the places that information goes and when information goes to all sorts of places even if it is anonymous the identified information it may be objectionable may well be objectionable to the people whose information is being passed around in that fashion. The other piece to this is in terms of informatics I mentioned that cluster of disciplines is a cluster of disciplines because there are more and more subfield of informatics that whole domain is built on the acknowledgement that when you take information and you cluster it and you use it in such ways that you can develop new profiles and new understanding patterns in data that you otherwise would not see once you start aggregating it. And once you start working with the data they provide information on the individual that the individual may not have about him or herself. So in fact these third parties know much more about individuals that may know about themselves and they're certainly not sharing that information back with the individual which would be from an ethical standpoint if someone learned something about you in this fashion. It seems that there is an obligation understood obligation for the individual to feed the information back to you but that doesn't exist. So in fact many of the sort of hallmarks that we consider of ethics and social work practice and social work research such as self-determination confidentiality perhaps even justice are being undermined by the way in which data is moving around the Internet and through other channels. And then there's a flip of that coin which is that there are assumptions that people appropriately and accurately represent themselves in anonymous formats.

[00:31:26] But the question is do they really so you can they making a whole lot of assumptions about who and audiences are who a group of participants are but you have no way of delegating or verifying that information. And so it seems to me that part of the methodological issues that anybody doing this research is obviously going to be both confronted by and confounded by is figuring out that which is real in a digital world and that which is perhaps misrepresented or supposed. You know that's an excellent point you know makes me think of the census in the previous census as I was a census worker in enumerator numerator and then a crew leader. And you know we were led to understand that the Census Bureau has a good understanding of what the population should look like. So they're able to impute missing data. But still the census takes the

trouble of actually sending out census workers enumerators to actually knock on doors to get more information and part the reason is they recognize that people do not necessarily they're not necessarily truthful in what they divulge. I mean we think the mind leaps immediately to immigrant groups for example. But there may be others as well who are not anxious to give the information to the federal government even though the census makes it quite clear that they won't share with other federal entities. So by the same token with many of the engines of social change such as you know legislation and allocation of social and public goods including actually the commercial side too are really being driven by the data that are being mined from sources that may you know distort the data of the data themselves may be distorted and then decisions are being made.

[00:33:05] For example about allocating public goods decisions are made about what goods may be available to consumers at what price having an impact particularly obviously on the most vulnerable and disadvantaged groups. So your point is really well taken. Well the census is also an interesting example of part of what you're talking about. It clearly is a social force that's about as technological as it can get. But one of the problems with the census is that it often breaks down communities into postal codes. And the problem is for those of us who work on the street is that the way a postal code is defined is not necessarily how members of a community defined their own community. And so the fact that somebody's mail addresses in the same postal code may in fact have nothing to do with whether they're considered part of that neighborhood. And so it seems to me that one of the problems and I think you've really looked at this probably more philosophically than usually see people do is that in using technology you can get into a habit of convenience without necessarily thinking clearly about data sources data use and data implications. And in that sense as a social force you know we can define a neighborhood as poor simply based on census data base and zip code when in fact that neighborhood may perceive itself as very rich in other resources. Absolutely and you bring up a very good point. Not only is it convenient to use the data but the data that are convenient may be data that are not most meaningful to people in those communities in social work.

[00:34:45] We talk about the strength perspective for example and you were talking about how a community might be perceived and how it might be characterized and that that might be problematic if the data that are most convenient to collect are so through economic data or employment data that don't reflect for example other strengths within the community for example social cohesion perhaps people's willingness to help one another perhaps the community good martialing and worship of the resources that are available to them. The community may not have the kinds of investments made in it otherwise could. Because it seems to me like it's a fairly standard way of looking at the world that if a community is viewed as not a good investment for resources resources will not be spent there. But it may be because the Brinks of the community are not being properly captured by the data because those data that would really capture that are either not well conceived or never pursued because the sort of standard data that would be collected anywhere are data that don't really reveal those strengths. So we're really back to the issue of how the interdisciplinary issues need to emerge. In looking at the role of technology within social research so for me this becomes quite concrete. I mentioned before I have a collaborator who is an engineer and he is actually a roboticist and he he has created actually he has. I'd like to give him full credit. He has really contributed a great deal to the development of an assistive robotic arm that really is going to make a big difference I think in the lives of individuals with spinal cord injuries traumatic brain injuries injuries having an impact on their physical abilities. So when I work I've worked with him on several projects.

[00:36:39] Now one of the things that I've noticed is that from an engineering standpoint from his discipline what's most important is to give people what they want and what would be most convenient for them which makes a lot of sense and on some level that's great. But I think about it from a social work standpoint I think about helping people increase their self their degree of self determination autonomy and community integration and so forth that which is easiest which is you

know most convenient for people may not be the thing that's going to help them succeed in society or to achieve some of their goals. And so for example I find myself suggesting that perhaps we might want to think about developing some parameters to use that term around the robotic arm that would allow the individual to be more engaged engaged in the process of moving the arm through space even if it's a little less convenient because the exercise of doing that will give the individual a greater sense of mastery actually his data indicate that and will also make them more satisfied. And I think that we all need to have a certain degree of challenge or a certain level of challenge to have a sense of mastery just to make a quick parallel. I was reading in The New York Times recently about airline pilots and some concern that autopilot for example with airline pilots has let some of them to feel complacent and the complacency could be an issue. Now one could clearly see how complacency could be an issue for airline pilots for example who many who have many people under their wing so to speak may people's lives.

[00:38:17] Well complacency could also be an issue for all kinds of populations and the population you'd care to think about because complacency could lead to a less honing of skills and efforts that than might be necessary. And it seems to me that again part of it as a social worker lends in this is that it's great to have a functioning prosthetic arm but it's better if the people in your neighborhood see that as not something that they stare at but something that people have just because they have it like red hair or or large or small nose. And so I think one of the things that we also think about with technology is the impact on the individual but from a social worker perspective it's also around the impact on communities in terms of accepting back to our earlier discussion around the spectrum of normalcy. And you know as you know I have a husband in a wheelchair and one other thing so I know it's very difficult for us to be in a public place without people staring. And that's because our society is still not entirely comfortable with people using technology at whatever levels to just be part of society. And so hopefully as time progresses there's more of this that's available that I think will also have a greater acceptance of what the range of normalcies are. You know you've brought up two great points to start off with the last point that you've made I start thinking about grocery stores that are quite commonly have scooters and you see people riding around grocery stores and scooters. I think that helps normalize any mobility aid although that it impossible to get stuff off the top shelf. If you're in one that's true and that's what the robotic arm actually have.

[00:39:58] Part of what it's meant to do. Yes. So there are definitely limitations to it but I think your point is well taken. If people see kindred technologies used more and more and people can no longer say well is that person in the scooter in the grocery store or are they not able to walk or are they just fatigued and they want to use the scooter. I think that that certainly is helpful for all people using mobility devices and helping to enlarge people's notion of what is normal. For example my wearing the eyeglasses again going back to what you said earlier about community impact the way I think about it. If individuals who use technology have a greater role in the design the implementation and the actual use of the technology they're going to be able to articulate that they'll have a greater sense of fit with the technology. And then when other people were to query them they'd be able to say well this is how I work to be able to explain it to someone. And in so doing individuals would see those individuals using the technology as not captives of the technology but active users and I think that we tend to have more respect for people generally we feel empowered and active users of whatever's in their lives. I think that would help decrease the amount of stigma around such use because people would think this is really impressive this person knows a lot about this technology they're using. I learned from this individual. This is clearly not an individual who is impaired in some way. This is an active user of technology.

[00:41:24] So in addition to helping the individual out because I think we all need to be active agents in our lives. It also changes people's perceptions of people with disability for example or others who may use such technologies as rather than dependent users as active agents in their own lives. So when you talk about natural collaborators and your relationship with this engineer that's

really around it seems to me you are sort of reflecting this exact conversation that it's around using using somebody with the skills and knowledge to make a prosthetic arm that will in fact reach the cans at the top shelf. Understand the implications of that for the person that is I can reach the cans at the top shelf but also begins to normalize our perspective. The fact that there are people in scooters who will use technology in order to have basically the same transparent lives that all the rest of us have. As we move through our various parts of the world. Right. Absolutely. So as technology becomes more and more the way in which we naturally manipulate the world these collaborations we'll see more and more natural also because they lead to this. The other pieces they become more natural. I think at the heart from my experience of disciplinary work at the heart of interdisciplinary work lives many many conversations. So my engineer friend and I have had many conversations trying to understand each other's point of view and we've worked together on projects which has been a vital part of that as well. And over time we've better understood each other's points of view.

[00:42:57] And I think it's informed both of our work and in fact we eagerly seek out each other to work on projects together because we find ourselves expanding our notions of what can be done and we share a common commitment for example my friend and collaborator to helping people with disabilities. And so we find our ways in which we can make our own contributions separately and in ways in which we can expand the perspective. Generally wonderful. So have I missed anything that I should have asked you. One thing is you didn't ask was How did that you know was my view of the future in terms of technology and people who are served by social work. Is it utopic. Do I think it's I'm a skeptical optimist. I think the technology is really critical. I mean I really enjoy my collaboration with technologists and people who are very much steeped in technology because I do think that technology holds forth many positive avenues for the people whom we serve and social work to actually be a positive social force to lead to raising the standards of living conditions of living of many of the disadvantaged and vulnerable groups who we work with by the same token I'm also skeptical about it because I feel that until we become much better. And this also includes social work as a profession at truly involving the people who are the end users in every phase possible of the design of such things. The implementation of such things and the diffusion of such things were going to fall short because no matter how many well-meaning technologists are social workers there are working on these problems unless the individuals who are the end users are really very much involved in this process.

[00:44:39] We're going to come up with something that really won't be as useful or as relevant as it should be and this is why I'm actually quite interested in how community development could be connected to this type of work example that comes to mind that I taught in one of the courses I used to teach was about the Dudley Street Neighborhood Initiative in Boston's Dorchester section. In that community group over time and they've been together I believe now over twenty five years. They actually developed strength from within the community where when they were thinking about community planning. One of the young people who was involved early on actually went through training to become an architect and became an architect who then worked in the community and with the community on community planning issues. So I think as much as possible get third of Indigenous talent involved in this I think it's really critical. If technology is going to be a positive social force I actually have a follow up question to that I know that you're currently at the University of Central Florida where you're an associate professor and the director of research but you're moving to a new position. Are you going to be taking this work with you when you go.

[00:45:49] Absolutely as a matter of fact one of the things that seems to me like serendipity is there a number of things about this transition I'm making is that my new university universe the University of Texas at Arlington like the University of Central Florida there are really strong technology engineering science core and so what's really great about that is that there are lots of opportunities to continue this work and there's a real as I perceive it hunger on the part of those individuals in those fields to work with people in social work and applied social science fields to

actually make society a better society. So I see lots of opportunities to continue this and there is a real interest within our own school of social work at UTA to continue to develop interdisciplinary opportunities and to really launch forward in the interdisciplinary 21st century efforts to make society to help improve society. Well as always John it's just wonderful talking to you and I look forward to listening to your podcast when to show up on the UB podcast series. So thank you very much for this conversation. Thank you so much for these wonderful questions. I really appreciate it. You've been listening to Dr. John Bricout discuss assistive technologies and their impact on disabled persons employment and community participation on Living Proof. Hi I'm Nancy Smith professor and dean at the University at Buffalo School of Social Work. Thanks for listening to our podcast. For more information about who we are our history our programs and what we do we invite you to visit our website at [www.socialwork.buffalo.edu](http://www.socialwork.buffalo.edu). Here at UB we are living proof that social work makes a difference in people's lives.