INTERVIEW WITH DON IHDE
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Participants: Don Ihde and Anders Albrechtslund.

Don Ihde is Distinguished Professor of Philosophy at Stony Brook University, NY. Anders Albrechtslund is a recent graduate in Philosophy from the University of Southern Denmark.

Albrechtslund: I would like to begin with a general question. How do you see philosophy of technology in relation to philosophy in general? Why do you think technology has become a philosophical issue today?

IHDE: That is actually a very interesting question. Obviously philosophy of technology comes very late to philosophy. I think, in part, that is due to a traditional prejudice in philosophy to think of itself as being primarily geared toward the theoretical, the speculative and the abstract etc. Technology is clearly something very material, concrete and particular. Although philosophers have used technology metaphorically as early as Plato, they really did not get interested in technologies per se until late modernity. In the nineteenth century, Marx and other neo-Hegelians got interested in modes of production and technology and so forth. I think this is in response to the increasing obviousness and powers of technology that maybe only became apparent with industrial size technology, even though humans have always used technologies in some respect.

But philosophy of technology, as it is now, is really a twentieth century phenomenon, even though there are anticipations in the late nineteenth century. It arose, I think, most dramatically between World War I and World War II. World War I was the first war that deployed what can be called industrial technologies such as machineguns through tanks to airplanes.

Albrechtslund: …What you with an American word call ‘rust belt technologies’?

IHDE: Yes, industrial rust belt technologies in their early days. And this alarmed, I think, a whole generation of particularly European philosophers. If you look at everybody from Nicolas Berdyaev to Ortega Y Gasset to Heidegger to Jaspers – practically all of those main mid-twentieth century philosophers commented one way or the other on technology. And of course World War II amplified that to an even higher degree. Evan, my student who has a job at Rochester Institute of Technology, is going to be participating in a program on war and peace. He asked me for some bibliographical references – which philosophers should be included in an anthology on this subject. And I began to think. The interesting thing is that technology made the war and its consequences so dramatic, but very few people wrote thematically about that particular issue. That is interesting.
ALBRECHTSLUND: You mentioned Heidegger. It seems to me that his thoughts on technology are
difficult to separate from a more general philosophical project including his thoughts on poetry, art
and being. Later, you and other philosophers of technology have turned technology — or rather the
manifestations of technology — into a philosophical issue, and it seems to me that it is a little differ-
ent. Is philosophy of technology today an independent philosophical discipline?

IHDE: What you are mentioning now has been noticed quite dramatically by a group
of Dutch philosophers of technology. They published a book in 1997 (in Dutch),
which literally translated would be called From Steam Engine to Cyborg: Thinking Tech-
nology in the New World, where America is the new world. I had the book translated
for the philosophy of technology series under the title American Philosophy of Technol-
ogy: The Empirical turn.
In the book, the Dutch philosophers discuss six American philosophers of technol-
y. They generalize to say that American philosophy of technology is quite differ-
ent from Heidegger and the other master European philosophers of the mid-
twentieth century. The Americans are much more empirical, they look at specific
technologies in relation to concrete and on many occasions more pragmatic kinds of
situations. I think they are right. I do not think that those of us discussed in the
book do this as something conscious per se, but we are responding to the perhaps
too abstract, too transcendental, and I will also say too dystopian views of the Euro-
pean godfathers.
Another interesting thing about philosophy of technology, besides its late arrival, is
its slowness to catch on. Other movements and traditions in the second part of the
twentieth century, like feminism and deconstruction, seems to have caught on very
fast and is widespread. Philosophy of technology remains relatively small, but I
think it is catching on now. It is amazing to see the number of books, which is ap-
pearing these days.

ALBRECHTSLUND: This brings us to my next question concerning the status of the philosophy of
technology today. I recently read an interview from 2000 where you state that philosophy of technol-
ogy has reached a plateau or level where it does not seem to evolve. Do you think that is changing
now?

IHDE: I think that is changing now, but it is in ways that I did not expect. Here is a
concrete example: Last month I was approached by the editor of the philosophy of
science association’s journal, which is the main philosophy of science journal in
America, and he invited me to do a state-of-the-art review of philosophy of tech-
nology. Now, that is in itself is an indication that philosophy of technology is being
recognized by a mainstream journal.
The immediate rationale for this was, that the editor would like me to write a state-
of-the-art genre review of recent books in philosophy of technology. There are quite
a few new books, but the one mentioned was the new Blackwell anthology about
philosophy of technology, which is very large. So here is a major philosophical pub-
lishe who has published a major anthology of readings in the philosophy of tech-
nology. This is a signal that philosophy of technology is coming into some kind of
maturity in the field.
ALBRECHTSLUND: How do you see the future of philosophy of technology? There seems to be a strong pragmatic direction rather than – in lack of a better word – a more ‘philosophical’ direction in the tradition of Heidegger and the other philosophers you mention?

IHDE: Definitely. I think the future of philosophy of technology is tied to being interdisciplinary. It is a discipline that, I think, could not possibly be ‘purely’ philosophical. You need to draw from other related disciplines such as the disciplines of science studies and sociology of science as well as – certain kinds at least – of philosophy of science. These disciplines lead into the twenty-first century philosophy of technology. This is maybe my taste, but I think it needs to be pragmatic or empirical because there are so many diverse technologies and technological directions that need to be examined fairly specific to get any depth in the analysis.

I need to go back to your comments about the godfathers. The problem with Heidegger is that he saw technology basically as applied metaphysics, and he is transforming it into a kind of general metaphysics of – let us say – the European sort. That is how everything was interpreted in terms of technology and that necessarily abstracts from the diversity of technology. The analysis needs the pragmatic or empirical aspect. There was a review of the Dutch book in Review of Metaphysics and the reviewer made precisely this point. The American philosophers of technology take different kinds of technologies to work out the philosophical implications: Hubert Dreyfus with computers and artificial intelligence and me with scientific instrumentation and so on.

ALBRECHTSLUND: Let us turn more directly to your own work in philosophy of technology. I would like you to elaborate on your philosophical method and your view on phenomenology. You have said that you consider yourself a phenomenologist or ‘post-phenomenologist’ in lack of a better word, and you have called your method ‘experimental phenomenology’. How would you compare your views with for instance Husserl’s and his method of ‘Wesenanschauung’?

IHDE: This is being discussed a lot these days. In March there was a conference at the Kent State University, which was titled “Post-phenomenology” after my book. I was asked to reflect on how I have changed my perspectives on phenomenology and where we should go from here, so I called my paper “Post-phenomenology – again”. I still consider myself a phenomenologist, or better a post-phenomenologist, in the sense that I emphasize certain techniques that, I think, are essential to philosophical method. For instance, I make variational theory a part of everything that I do in my analyses.

Here is an example: A technology – whatever it is – turns out in most cases to have a fairly large number of ways in which that technology is or can be used and these are never restricted to what designers intended or what is thought to be the outcome of the technology. This means that any given technology will end up having different kinds of uses in different kinds of contexts most of which cannot even be predicted. I think that my version of variational phenomenology has an edge, because I know that this is going to happen. The question is if we can look at both the historical and the imaginative possibilities of any particular given technology in terms of this multiple set of directions in use.
My version of phenomenology is pragmatic in the sense that I always study something concrete. This ‘materialistic’ phenomenology is very different from classical phenomenology. I have nothing in common with transcendental thinkers or with any of the vestigial remains of subjectivity in the Cartesian sense, which I think is still there with Husserl in some respect. Instead I go with the more Merleau-Pontian, possibly later Husserlian, sense of embodiment. Therefore, as a phenomenologist I have to be characterized as a very heretical one if the orthodoxy is Husserl’s early phenomenology. On the other hand, I think it is phenomenology in the sense that I am doing variations, showing complexities and showing how experiences become intuitable. In that respect I remain within the general tradition.

ALBRECHTSLUND: That leads me to another question brought about by the interview I mentioned before. Merleau-Ponty and perhaps the late Husserl have inspired you and yet you claim to be a ‘post-subjectivist’. Both Merleau-Ponty and Husserl are subjectivists in the sense that they try to embody subjectivity. How do you see the difference between this kind of subjectivism and your approach?

IHDE: I will call myself both a post-subjectivist and a post-objectivist. I think that subjectivity and objectivity are in effect invented with early modern epistemology, where Descartes and others introduced this contrast of external material reality and internal subjective reality. I reject that formulation entirely.

Instead I am a relativistic thinker – not a relativist, though! That is I think you always have to think of things in inter-relational and interactional terms. For example, to analyze technologies you do not simply analyze what normally would be called a subjective description of the users and the objective situation of what technology does in the world. Instead you look at the interaction between humans, whether individual or socially, and an environment accordingly.

I am also not a post-humanist. I think the emphasis upon embodiment is necessarily an emphasis upon human embodiment. I grant that insect embodiment, cat embodiment and dog embodiment have a lot of analogues to human embodiment, but they are also different. A fish that has eyes on two sides of the head clearly has a totally different field of vision than we have, although I do not doubt that it has a field of vision. We can only go through apperceptive and imagined steps into different kinds of embodiments, so in that sense I think there is a center of gravity or focus where it is necessary for us to understand how it is that we can experience the world through our bodies. In that respect I am not post-humanist, but I am a post-subjectivist.

ALBRECHTSLUND: This reminds me of discussions concerning artificial intelligence. You disagree with the point of view that epistemology might go beyond human experience?

IHDE: I think there is a strand among so-called post-humanists and I think this is something maybe Finn Olesen and I will end up arguing about next fall. There is a strand almost necessary in post-humanism, which is a throwback to the notion of an ideal observer or a non-perspective ideal observer and I precisely reject that. Post-humanism brings back an element of Cartesianism and I find that to be a contradiction.
One of the things that we can learn from technologies is the way in which they can relate to things very differently than we relate to things. I mean, I do not want to get stuck in a similitude metaphor to say that the only thing we can understand is that which is like ourselves. In fact, what may be more interesting about artificial intelligence is not how close computers can get to human thinking, but rather how far they can go from human thinking. We can learn from technology if we study this.

But an important thing to remember is that this has to be ‘translated’ back to our capacities. In the last half dozen years I have been studying imaging technologies. These technologies images things like gamma rays and radio rays that we cannot directly experience at all. To make this understandable all of these images have to be translated into shapes and colors that we can understand. Now, we understand at the same time that these are false shapes and colors and we learn that through perception. That again is an indicator of the fact that we have to – implicitly at least – take our embodiment into account in any kind of relation with technology.

ALBRECHTSLUND: Let us turn to something else. Last year, you were in Denmark to do a seminar on your book Bodies in Technology. At the seminar, you talked about a future project called ‘Against the history of philosophy’. I would like you to elaborate on that project and discuss the significance of the philosophical tradition to your work with philosophical problems.

IHDE: ‘Against the history of philosophy’ is an attempt to broaden the view of philosophy, which seems to be very theoretical and abstract. That is sometimes expanded slightly to language, history and tradition, but to me, that is still a narrow focus. In June, I am doing a paper in Budapest with the title “More Material Hermeneutics” and it deals with this. It shows my inspiration from science and technoscience studies. I have become very sensitive to the sociologists of science and the philosophers of science who are interested in instruments and experiments. What I am calling ‘material hermeneutics’ is something like this: the natural science of course is trying to study and learn about things that are not human in themselves. For example to study the chemical makeup of the star Sirius, you need to do it via instruments like spectroscopes and so forth. This process can be described as making the thing reveal itself, making it reveal its chemical structure, and I think that is very phenomenological. The important thing is that it did so not by means of texts or languages or traditions. It was doing so by intervening with the emission patterns from the star.

What I am trying to do with my expanded notion of hermeneutics is to show in effect why an analysis focused on tradition and language is too narrow. Let me give you an example: In the eighth century the Vikings began to invade England. Monks living in the monasteries, which were being burnt down by the Vikings, wrote the textual tradition about this invasion. Of course the Vikings were portrayed as murderers, killers, rapists and burners of monasteries and this is the only basic written history of the time. Let us say we were transported back to the time of the Vikings. Then we would see that the writers clearly have a perspective from which they are writing. Just as bank robbers rob banks, because banks are where the money is, the Vikings raided the monasteries, because that was where the gold was. But this leaves out what else the Vikings did. Well, what else the Vikings did can be evidenced in for
instance the laws – the Dana law became part of the English law. Other evidences from the Danish and Viking traditions are money and trading. All of these evidences are practices and *things* instead of text. So this is a sort ‘minimal version’ of a hermeneutic analysis.

Let us look at another well-known example: Ötzi, the 5300-year-old man whose body has been discovered in the ice. Now, there are no texts whatsoever – in fact we are not even sure that there was anyone writing at the time when he died, but we now know that he had mountain goat or venison among his last meals. We know that he came from such and such a place by virtue of pollens that only occur in that place and in fact that he died or was killed in the spring rather than the fall because of the *type* of pollen that was found. So here is a totally non-textual history, but we know a lot because we are making the things speak. And what the things are speaking are in this case apart from any traditional, textual history. And the Viking case is in fact supplementing the textual history, and I can find other examples where the textual history is contradicted by the material history. So, when I say ‘against the history of philosophy’ I am saying that until we get a broader, more multi-dimensional, more phenomenologically variant history, we do not have a history. It is too narrow, not looking at the whole picture.

ALBRECHTSLUND: So, I guess you do not see a ‘necessary path of thinking’ or something like that and philosophical knowledge is not necessarily mediated by the philosophical tradition, as Heidegger and Gadamer seem to believe?

IHDE: Ironically, here is one of the few places that I will call myself a heideggerian. Heidegger’s theory of time and temporality is this: One makes a projection of the future, which then reflects back into the past and constitutes a present. Another way of saying this is, that the past is only what it is in relation to a projection of the future and therefore it changes. If you have a different projection of the future or a different set of possibilities, the past necessarily changes. So my kind of history – my ‘material voices’ so to speak – is different than the one that Heidegger and Gadamer are talking about in relation to the tradition of philosophy. But I am using their notion of futurity to make that change – of course along with materiality and history-in-relation and so forth, which altogether reveals that changed history.

ALBRECHTSLUND: The philosophical tradition can be helpful in your philosophical work, but it is not a necessary reference or condition?

IHDE: I think contemporary philosophy is fallibilistic, I think it is contingent, and I think by the end of the nineteenth century it should have learned no longer to be coincidentally metaphysically. There is no way in which I think we should return to that.

ALBRECHTSLUND: Now I would like to ask you a more concrete question about your early works. I find your work on technologically mediated perception very interesting and I think it is among the most important within modern philosophy of technology. I would like you to tell how you got interested in technology. The first time you write about it is in *Technics and Praxis*?

IHDE: That was the first collected stuff on this and it was published in 1979, but I actually started on this in the early seventies. I moved from Southern Illinois University to Stony Brook, New York in 1969 and already at Southern Illinois I had
started a project which I at that point called a ‘philosophy of work’. Back then I at-
tended a seminar on the theme “Work and Leisure” and I remember a kind of uto-
pian mood where some people thought that, with technological advancement, we
would have a lot more leisure time, and they wanted to discuss what we should do
with all this leisure time. It made me interested in technology, because I did not be-
lieve that technology would give us more leisure time.

But the big move was when I came to Stony Brook in 1969. It was then that I got
interested in scientific instrumentation, because Stony Brook has a lot of focus on
scientific research. I began to think about the way in which science produces its
knowledge, which clearly is tied – in at least late modern science – to its instru-
ments. That was the origin. That was when I began to think about the mediated ex-
perience and cooperating that into what traditionally was a phenomenologically con-
text. I think already by 1972 I was writing some of the essays that are in
Technics and Praxis.

ALBRECHTSLUND: So that is the story behind the theory – it was partly your phenomenological
background and partly because you came to Stony Brook, which was a place with a lot of science
and therefore problems caused by technology?

IHDE: Right. The environment was different and I was responding to the environ-
ment and of course also part of my own interest.

The two first books I wrote that had something about philosophy of technology are
Listening and voice (1976) on auditory phenomenon and Experimental phenomenology
(1977) on multistable visual phenomenon. Both of them had a bit about technology,
but for the most part they were ‘standard view’ books with phenomenological analy-
ses. But about that time technology began to be a much more present and even fo-
cal kind of interest.

But over the years I found that this interest in technology caused real problems in
conversations with Europeans trained in the phenomenological tradition in particu-
lar. I have tried to point out how at least the later Husserl, Heidegger and Merleau-
Ponty anticipated the incorporation of technologies in the lifeworld. But many
Europeans seem to have a terrible problem with this. They still like what I think is a
kind of subjective extreme version of phenomenology. Since I reject subjectivism I
have always found that to be a frustration – that is my European frustration! My
Anglo-American frustration is of course that we are dominated by the analytical phi-
losophies. They have their own kind of set of prejudices against anything that has to
deal with embodiment – even perception for that matter.

Until I discovered people like Ian Hacking, Bruno Latour and Peter Galison I
thought I was very much alone. But these guys, each in their own way, study tech-
nology. I could either say that I think like they do or that they think like me – Bruno
Latour and Steve Woolgar’s book Laboratory life came out in 1979, which is exactly
the year Technics and Praxis came out, so who was first? I don’t know. But we were
thinking along similar lines.

ALBRECHTSLUND: The theory of technology-mediated perceptions – that some things are dra-
matically amplified and others are reduced – how did you come about that theory? I guess you used
your phenomenological method?
IHDE: Absolutely. Everything I have ever claimed in any of my books about technology I have tried myself or with others. In the phenomenological sense I am a very empirically oriented thinker. When I came to Stony Brook in 1969, I introduced the course of phenomenology and I taught both at the undergraduate and the graduate level. In the early days we would do thought experiments, variations and studies of artifacts. For example one of the experiments was to take a knife and I would point out how you could feel the texture of the tablecloth through the knife. Now, this is a very simple technology, but you can feel the texture of the tablecloth through the knife and that is an experience similar to Merleau-Ponty’s study of the blind man with the cane. We did things like that all the time. Today I also do studies like that with my telescope – I have my own telescope and I do variations with it.

ALBRECHTSlund: I think it is a very interesting theory. You have also said that if technology did not change human experience there would not be a motive to use it at all. That is of course true, so in some way your theory states the obvious?

IHDE: In some ways everything I do is obvious, but not easily obvious. Let me go back to a distinction, which I learned a long time ago from Paul Ricoeur. As you know, he was interested in hermeneutics of belief and suspicion, looking at Freud, Marx and Nietzsche as suspicious hermeneutics and so forth. He distinguishes between what he calls ‘first naïveté’ and ‘second naïveté’. An example of first naïveté is a religious person who simply believes that the bible is literally true. That is a very naïve reading. I have a theological degree, but I have also undergone criticism and you simply cannot read the bible literally. We are back again ‘against the history of philosophy’! The bible cannot simply be read as a text in a tradition. It has got to be put as a text and a tradition in its material history. Now, can you have a belief after that? Yes, you can have a different kind of belief, but no scientific observation is going to be possible under the first naïveté – it has to be under second naïveté.

Here is an example I use a lot: The Chandra x-ray source is a sensor, which receives x-ray emissions from various places. Now, the Crab galaxy is a big galaxy, which astronomers have studied for a long time. When you look at the x-ray slice of what is emitted, it turns out to be a big Taurus with a very tight center with two jets coming out to the sun – it has a pulsar in the center and the two jets are radiation jets. You can only see that from an x-ray and not from a composite or light or other slices of emissions instrumentally, and this is what I call ‘instrumental realism’. We get something from the star that is patterned into our human perceptual situation and then we use charts and descriptions to understand it. This is a mediated perception and there is no twenty-first century science, which is not mediated. So, here is a really interesting phenomenological situation: we need the technologies and at the same time they have to be translated into human perception. But this is also far beyond anything like let us say a linguistic situation.

So I think you could say that I am a phenomenologist or post-phenomenologist who learned a lot from science practice. I see a lot of science practice really doing good phenomenology and hermeneutics. I think, unfortunately, there are not very many people in this tradition, who have become interested enough to discover what is there.
ALBRECHTSLUND: Before, you mentioned ‘multistability’ and I know it is an important concept for you. Is multistability contrary to what is known as ‘the given’ in the phenomenological tradition?

IHDE: Totally contrary! I think that the notion of ‘the given’ is radically misunderstood. It is traditionally thought that phenomenology deals with analyzing the given. I do not think that is what phenomenology does at all. I think phenomenology deals with how something can appear to be given. Multistability is to analyze the conditions under which this or that stability can be experienced as given. But the deeper level is that there are multiple sets of possibilities, which can be equally given, and hence, in some cases at least, there is no primary given.

ALBRECHTSLUND: What about invariable structures?

IHDE: That is a different situation. With invariable structures we are all back to Husserl and essences, foundationalism and all of that. I think that multistability is in some respects a structural phenomenon and hence it is invariant, but it takes different shapes, different directions under different conditions at different contexts.

Let us go back to embodiment. My unwillingness to become post-humanist has to do with what I think is the invariability of being a human body – and not having a human body, but being a human body. That is a kind of invariance. Now, how do I evidence this? That is something I spent a lot of time on at the moment. Next week I am doing a talk in Hull, England and I am trying to show how human embodiment is implicit in a lot of different kinds of practices, and I have a whole series of illustrations about this. For example if you see through binoculars, you have to remove them to get a different view. And only if you do that, you can point out what is different between the two variations.

ALBRECHTSLUND: I guess you would also say that the technologically mediated perception is an invariant structure in the sense that some things are always magnified as well as some things are reduced?

IHDE: Yes, within limits, because there is also multistability. Let us use a weird example: One of the things that are apparent to me and to a lot of people is that the culture of science is very visualistic. Scientists try whenever possible to make their results into visual phenomenon – whether abstract in terms of charts or less abstract in terms of images. Most of the time that ends up in the trajectory to reduce all the other sensory dimensions to the visible and that is a pattern in science culture. Donna Haraway puts this into a different context – she puts it into an evolutionary context: she says that humans are binocular predators and that like all good binocular predators are looking for prey. According to her, humans have this built-in predator surveillance. It is actually very deep, because if she is right, then the tendency to be visually oriented is actually built into us biologically. And that adds a very different set of meanings, if you will, to what it is to make a ‘visual observation’. I find her theory very interesting and I think this is another indication that you can find very good phenomenological analyses everywhere.

ALBRECHTSLUND: Visualism – and light – seems to have been a strong metaphor for thinking, truth and understanding all through the history of thinking. Do you think there is a connection between this metaphor and visualism in science?
IHDE: Yes, I think in some respect that visualism in science is a result of this. But generally I think we vastly underestimate the other senses. But for me, visualism is part of the culture of science. I do not think it necessarily needs to be this way and I have suggested a lot of other ways in which science can operate. The problem with visualism is that it is a doubly reductive movement: the reduction of everything to a visualistic form and reducing the variety of meanings with accru to the non-visual properties. At the same time visualism is a gain, because it captures the human ability to seek patterns, to get gestalts, to see inter-relationships. This is all possible with vision and that makes it a powerful sensory act.

ALBRECHTSLUND: Do you think the visualistic culture is forming science in a certain way?

IHDE: Yes, absolutely. But that is not a common view particularly with the analytical philosophers. They do not like it. They think that because our brains have so much brain area devoted to visual capacities, therefore it is natural for us to do that. Of course, I do not agree with this. Fact of the matter is that the auditory capacities are pretty much equal to visual in terms of possibilities.

ALBRECHTSLUND: Thank you very much for answering my questions!

IHDE: You are welcome.