

MIND AND REALITY - Day 1

Tape 3 of 8 - Panel on Knowledge

\*\*\*TAPE START\*\*\*

**CHRIS KELLEY**

00:01.01 I'd like to call your attention to the pink cards that were on your seats. They're probably on the floor now. But these are for questions. Unlike the keynote, for the panel, we ask you to write your questions on these pink index cards and we'll collect them and give them to the moderator, Gary Tubb.

00:01.22 Yes, we'll be handing them out, as well. So if you need a card, raise your hand and, you know, we'll give you one. And feel free to raise your hand while the panel is going on. I'd also like to just address some questions. If you didn't get to ask a question in response to the keynote, I encourage you to go online to our event blog and post your questions there.

00:01.45                    There is a comment option, which could be a question option, as well. You can also download target essays, Owen's essays. Everything is available as well as other online resources at our blog, which is [www.blog.mindandreality.org](http://www.blog.mindandreality.org).

00:02.06                    At this time, I just want to tell you a little bit about this panel. We're calling it the Knowledge Panel, primarily because the focus is epistemology. Part of what we're trying to do here in Saturday is really address the theoretical issues concerning human consciousness.

00:02.25                    Much of the debate surrounding the relationship between mind and reality concerns the nature of both the content and properties of mental thought. What contemporary Western philosophers refer to as intentionality and qualia. As in the West, Buddhists and Hindu epistemologists from India and Tibet have studied mental events and

cognition in terms of direct realism,  
representationalism and phenomenism.

00:02.50

Within the relatively neutral framework of logic in ancient India, a system of validation known as valid cognition - pramana (ph) - was employed to scrutinize reliability of truth claims put forth by competing Nyaya, Mimamsa, Jain and Buddhist philosophers.

00:03.10

At this point, I'd like to turn it over to Gary Tubb, our moderator who will give an introduction of all the participants on Panel One. Thank you.

**GARY TUBB**

00:03.24

Welcome to the panel on knowledge. And thanks to Chris and Annabella for their amazing energy and competence in putting all of this together. For each of these panels, we'll have a target speaker followed by a few brief responses from other speakers and then we'll have a little discussion from the table and then a general discussion with

questions from all of you. As many as we can get to.

00:03.54

In the interest of giving as much time to that as possible, I'm not going to give biographical information on people beyond their names and affiliations because you can easily find all of that on the very nice Web pages that Chris has put together to go with this conference. So I think I'll just name people as they come up in the order of speaking and we'll take it from there.

00:04.18

Our target remarks for this panel will be given by Professor Georges Dreyfus who is the Professor of Religion and Chair of the Department of Religion at Williams College. And so I'll turn it over to him.

**GEORGES DREYFUS**

00:04.35

Thank you. I want to thank the organizer for inviting me. I'm not sure what target- Ok. It's

fine if it works. Does it work? I'm not sure what target essay's supposed to mean. I feel like someone I have a big target sign on myself and people are going to take pot shots, but anyway I'm supposed to be trained for that, so that's fine, too.

00:05.07

My topic, my paper is available on the Web site, so I'm not going to really launch into an elaborate discussion, but I am going to try to summarize my topic. Which I think is already quite ambitious, though it's by far not as ambitious as some of the remarks which Owen has made.

00:05.28

I have no claim of solving deeper metaphysical problems, but just to explore - and "just" is obviously in comma - just to explore the notion of intentionality. Now, I said just in comma because this is obviously a huge can of worms and in this room there are a lot of people who are

much more competent than I am to talk about this issue.

00:05.52

So, I'm going to limit myself, use a little defensive strategy, but I think it's appropriate. And talk about what I know a little bit about, which is how Buddhists, some Buddhist thinkers have dealt with this topic and particularly Dharmakirti, about whom we have already spoken.

00:06.16

Now, the starting point of this enterprise may be with a famous quote from Brentano, which is- goes "Every mental phenomena is characterized by what the scholastic of the Middle Age called the intentional inexistence of an object and what we could call also, not entirely in unambiguous terms, a reference to content, a direction upon an object by which we understand a reality, in this case, or inanimate objectivity."

00:06.44

Now this is a mouthful. And there are people in this room who are experts on the kind of

tradition which have dealt with this question, but it is important to remember that the term intentionality is a Western term. I do not know of any Buddhist term which would directly translate - and Gary and Stephen will correct me if-

00:07.07

-would directly translate the notion of intentionality. So what I am doing here is a little bit of what my friend Jay called "fusion philosophy," which is trying to establish a dialogue between Indian philosophy or Buddhist philosophy in this case and some of the similar discussion in the Western tradition.

00:07.30

Now, my paper, as I say, starts focused on Dharmakirti, who is by the way not 7<sup>th</sup> century BCE, but 7<sup>th</sup> century CE. So, let's make this clear. So, his view of the mind is in many ways very typical of the Buddhist Abhidharmic tradition. That is a mind for the Abhidharma is

made of a stream of moments of awareness. A stream of mental events.

00:08.02

And Dharmakirti is for the same view. Now, one particular characteristic or one aspect of a take on the mind is that the mind is understood from a first person perspective. And in that I think the Buddhist tradition is not very different from some of the Western thinkers who have been already mentioned here, such as James, Surcell (ph), and so on.

00:08.29

Now, what Dharmakirti contributes to this Buddhist discussion of the mind is an epistemological reflection on the nature of the cognitive advances, which are part, which constitute the mental stream of sentient beings.

00:08.52

Now, the key element in Dharmakirti's theory is a term, akara (ph), which I translate as aspect. Which is basically a kind of representation. The idea is that we do not perceive directly the

world, but we take the world, we perceive the world by, through representations, which are generated in our mind in, through the contact with the sense and the external object.

00:09.23

So, this is a kind of- It is, in a way, a representationalist view of the mind. Now, we could have here very kind of, simplistic view of representation and take for a presentation is something which is come from the outside world, which is generated in our mind and then interpreted by our thoughts.

00:09.45

And I think there is some elements in maybe Locke and some of the other British empiricists, which lead to this kind of view. I have argued in my paper that the Buddhist view's actually more complex and I would say more sophisticated than that. At least, that's my judgment, obviously.

00:10.05

Now, the problem with this view of let's say, representation as a kind of copy image of the

external world, is that it assumes that when we have impressions of the external world, well- That we have impression of the external world and that we take in the impression and just interpret it, or think about it.

00:10.32

The problem, obviously, is that it's hard to understand how these images, these impressions that we have, constitute in and of themselves knowledge. And Dharmakirti is very clear and quite sophisticated about that.

00:10.54

Because he understands that for him, there is a very basic difference which is to be made in which how the mind operates. The mind- one part of the mind, perceptions operate what he called, what we could call directly or without the mediation of language and concepts and takes the object as it is.

00:11.18

There is another part of the mind, the conceptualization, which deals with the external

objects indirectly and interprets them. Now, we could think then we hear that Dharmakirti's view of representation, of the mind, of representation is kind of classical empiricist's view, but it's not.

00:11.39

Because for Dharmakirti, Dharmakirti's quite aware that, like Sellers, for example, that impressions are not forms of knowledge. That when we are hit over the head, that contact with the external world is not the form of knowledge, but that it will become a form of knowledge only when it is integrated within our conceptual schemes.

00:12.02

For Dharmakirti, the discussion is couched in terms of pramana, which I translate and I apologize to the Sanskrit in advance, as valid cognition. Actually, literally, it means valid cognition, but for the sake of simplicity and to understand more the Buddhist view, I'm going to call it valid cognition.

00:12.25 For Dharmakirti, valid cognition implies the ability of that cognition to lead sentient beings to successful actions. And therefore, for a perception to lead, to a successful action, we cannot just see a patch which happens to be blue, but we need to see that patch as being blue.

00:12.46 And therefore, knowledge for Dharmakirti, it clearly involved not just a kind of bare taking-in of external reality, but involved a process of interpretation. And so, for Dharmakirti - and in my paper I lay down the way in which this is indeed in some way problematic for Dharmakirti, but I think it's- I would argue that this is a valid insight.

00:13.17 Knowledge, particularly knowledge about the external world, cannot be reduced just to our being impacted by external objects and generating a likeness of the external object, but involved a kind of cooperation between perception and

conception. And that, I think, is in a way the main point that Dharmakirti wants to make.

00:13.43

And I take him- I take this point to be roughly similar to what Sellers said a few decades ago. Now, I think in the, as I said, for Dharmakirti, his main purpose is to present an epistemology. And so, for Dharmakirti, the articulation of the fact that- of the different contribution of perception and conception is, in a way, what he's mostly interested in.

00:14.16

I think, however, there is a question of what is the contribution of perception in more precise terms to this cognitive process. This is a question, by the way, that I often have when I read Sellers, because Sellers talks about impression and he's very keen to argue that these impressions are not knowledge.

00:14.36

And as a- And I think I agree with that, but I am interested to think, to see whether there are

ways of thinking about the contribution of perception to the cognitive process, over and above saying that this just leads to interpretation.

00:14.54

Now, Dharmakirti's main way of dealing with this problem is to argue that perception induces or causes conceptualization and that's certainly the most important role of perception. There is, however, a tantalizing suggestion that there may be some ways to talk about the input of perception, which go over and above this strict causal role. And this is why I talk about a more extended sense of intentionality.

00:15.31

That is, intentionality that is the ability of the mind to be above, about something to be directed to an object. That ability for Dharmakirti in the full sense of the word, clearly involves the cooperation of perception and conceptualization. There is no full blown

intentionality in Dharmakirti unless  
conceptualization is introduced.

00:15.54

But, there may be a kind of weaker or more  
extended sense of intentionality and this is what  
I call phenomenal intentionality. And I have,  
really I am using a term which I don't really  
quite understand myself, but I'm suggesting there  
is something here interesting that may be  
explored.

00:16.18

Dharmakirti is, by the way, mostly a philosopher.  
The problem in these kinds of dialogues is that  
we - and no one has rightly talked about that is  
that we tend to over-generalize and talk about  
The Buddhists and The Scientists, as if these  
were kind of coherent positions.

00:16.40

Dharmakirti is, first and foremost, a  
philosopher, an epistemologist. And his main  
concern is, therefore, to do epistemology. It's  
not- Dharmakirti, whether he meditated himself or

not we will probably never know, but he's not well-known for his contribution to the theory of meditation.

00:17.03

So, nevertheless, he does mention in some part of his work that he invokes something which is a kind of phenomenological reduction, which is something like in some kind of meditative state, you kind of don't close your mind to these sensory inputs, but let your sensory inputs impact your mind. And you remain in that state.

00:17.32

And in that state, you obviously don't have conceptualization and conceptualization arise when you get out of that state. Nevertheless, it appears from Dharmakirti's suggestion that there is some kind of- perception is seeing something in some weak sense of the word seeing.

00:17.52

Now, I'm suggesting that this may be actually an interesting point for further research. That is, my understanding of this kind of dialogue is a

pretty much a pragmatic understanding. That is that we are proceeding here under the assumption that the mind can be studied in various ways and that basically first and third person approaches should be combined.

00:18.19

Now, I think contrarily to Owen that there are a lot of people - they may be in this room or not - but who would disagree with that if you are an elementalivist (ph), you clearly do not agree with that. So, we're already talking about a kind of limited segment of the neurocognitivist community.

00:18.39

But that's my understanding. Now, that understanding obviously involves that there is a kind of collaboration between both sides and that Buddhists are able to provide interesting first person accounts of meditative experience. But, and this is where you're going to be maybe shocked and surprised, if you look at the

traditional Buddhist literature, there are almost no first hand accounts of that.

00:19.08

And so you might say, well, why are you guys here? I mean, we thought you were bringing the data and in fact, if you look at your literature, there is practically no first hand account of meditative experience. There are a few, but they are very, very fragmentary.

00:19.24

So, I think here, there is an interest in a research project, which is like Alan is setting up a research meditation and research. And it would be interesting to kind of have people produce first hand accounts of various experiences. And probably most of it would be completely irrelevant, but there might be interesting things we could discover in this process.

00:19.48

So, this is one reflection that I- Could I have a little more time or do I have to stop?

**GARY TUBB**

00:19.55 You have another 5 minutes.

**GEORGES DREYFUS**

00:19.57 Five minutes, ok. I don't have much more to say, so that's perfect. No, so this is one point I wanted to make. Another point, I think, is that the picture that I gave of Dharmakirti's approach and the way it could be extended and used and so on, I think is going to be able to account for certain aspects of Buddhist- for certain kinds of- part of the territory that Buddhist Abhidharma or Buddhist psychology covers.

00:20.31 And a large part. But it's not necessarily going to cover everything, because there is in Buddhist tradition the idea that a kind of distinction between what you could call operative state of consciousness, which engage with the world. It might be perception or conception. And then a much more basic subliminal state of

consciousness, which is called by various ways in the Yogacharya (ph) tradition, about which my friend Bill is an expert.

00:21.00

It's called alayavijñāna - to store consciousness - but the idea exists in many Buddhist traditions. Not all, it's important to understand, but in many Buddhist traditions. And I think this notion, obviously, in some way plays an important doctrinal role and so, we should not assume necessarily that it is based on experience. But I think it is going to involve an interesting domain of the mind.

00:21.30

And a domain which is not well understood, if we take intentionality to mean conceptual intention or epistemic intentionality, as well as phenomenal intentionality. And as I say in my paper, Dharmakīrti does not cover this topic because his interest is different, but I think if within the framework of a conference like this, if we think about intentionality it is important

to include this kind of mental state in the discussion of intentionality.

00:22.03

Now, we could clearly say that this mental state, yeah, we could clearly say that these mental states are not intentional. At that point, we would be faced with the task of explaining in which sense they are mental and that's an interesting discussion.

00:22.23

We could take another track here, which was suggested to me by my friend Evan, reading in the phenomenological tradition, and talk about still further expanding the notion of intentionality and talking about a kind of operative intentionality.

00:22.47

It's an intentionality which is not object directed, but which is a kind of openness to the world, a kind of potentiality or capacity or receptivity, maybe, to the world that we have. And that would be one interesting way to explore,

to further extend intentionality. Or maybe we would not call it intentionality and call it something else.

00:23.14

But to understand what is, from the point of view of the Buddhists, a deeper or in the sense of more basic level of consciousness. That, I think, exploration would be actually quite interesting because there are a number of meditations in the Buddhist tradition, which have described as objectless.

00:23.34

And this kind of meditations, obviously, do not seem to be falling under the rubric of intentionality. At least if we understand intentionality in the sense of a kind of object directed intentionality. So I think that kind of exploration is going to be useful, actually, to the Buddhists, in a sense because I remember being always very puzzled by what this notion of historic consciousness is.

00:24.05                   Because it's described as unclear, subliminal but covering the whole body and so on, and it's not the sense of touch and all that. And I think with this kind of dialogue with Western ideas and Western neuroscientific practice, I think there is a lot to be learned about some of the more basic levels of the mind for all the sides. Ok.

**GARY TUBB**

00:24.32                   Thank you very much. That was perfectly timed. And we'll be hearing next from Ned Block, who is Silver Professor Philosophy and Psychology at NYU.

**NED BLOCK**

00:24.45                   Thanks, that was- I was very interested to read Professor Dreyfus's paper. It's the first thing I'd seen that explains Dharmakirti in terms that a contemporary philosopher or scientist, I think, can understand.

00:25.03                   So, I- I'm gonna- Since I have very little time, I'm gonna make three very short remarks, which I hope will help in the discussion. The first one I'm going to introduce the idea of the hard problem.

00:25.22                   Which probably many people here, since this is a conference on consciousness, have heard of. Well, so I'll just start with that. Ok, so the hard problem is the problem of how to explain conscious experience on the basis of its neural basis. The problem is that it seems that the neural basis of a conscious-

00:25.47                   We don't understand why the neural basis of a conscious experience is the neural basis of that experience as opposed to some other experience or no experience at all. So, to be, just to get into the problem, let me notice first of all that the notion of consciousness is ambiguous. I think many ways ambiguous, but probably the most basic ambiguity is this:

- 00:26.10                    On the one hand we have the content of an experiential state - that is, the content being red or being blue. So here I pictured it with a- well, I've got the person facing, perhaps the wrong way, but a person looking at a red fire hydrant and having an experience as a red.
- 00:26.37                    And this experiential content, I believe, is what Professor Dreyfus says Dharmakirti refers to with the term, akara. It's the aspect of the experience that represents the outside world. Ok, a second- But he can tell me whether that's true.
- 00:27.00                    A second component of the state of- the usual state of consciousness of a person anyway, is some kind of awareness of that content. So these things seem to me to be very basically different items. And I think if we don't distinguish them, we're gonna get in serious trouble.

00:27.18                   The content itself and the awareness of that content, which I've symbolized with this second arrow. The content itself represents the outside world. The awareness of the content represents the content. Ok, so-

00:27.37                   Now, so those are two different things. And I- what I think, I just might as well say in advance, what I think is what makes the hard problem hard is this thing in a cloud right here. It's the content itself. I think the awareness of the content is not - although it's mysterious, certainly, and difficult to understand - is not as mysterious as the content that it is awareness of.

00:27.59                   So let me just saying something about why I think this content is, fits in the category of what Professor Dreyfus says Dharmakirti calls akara. He says that akara has a dual nature. Now, I'm not completely sure if I understand the dual nature, but it seems to me it's something like

this - it's the aspect under which experience represents the world, but it's also something that is part of consciousness itself.

00:28.30 It's part of the phenomenology of experience. So, it's those two things that seem to me to make the content of an experiential state fit in this category of akara.

00:28.45 Alright, so let me now talk about them separately - the content versus the awareness. Now, I think one way to get a handle on content of an experiential state as opposed to awareness of it is to notice that the content of an experiential state is something we might share with a lot of animals.

00:29.04 For example, a mammal like a mouse that shares a lot of our visual system. Or maybe better the smell system. So, I've got cheese and licorice here, so the smell of cheese and the smell of

licorice might be something we could perhaps share with a mouse.

00:29.26

Ok, let me move now to the awareness of a conscious state. So, that is another state that focuses on the experience. It's much less plausible that we would share that with a mouse. I mean, for all I know, mice have very rarely or maybe never have any awareness of their own conscious states. It seems a rather more sophisticated kind of thing.

00:29.49

Especially if you think that one of the standard theories of awareness is on the right track. One standard theory is that awareness of a conscious state has to do with some kind of thought that encompasses that conscious state.

00:30.08

So, the awareness of my experience of red might be a thought that you could put in English as I am experiencing red, but in which the red would be actually part of the thought. The redness

would be presented to the subject as part of a thought content.

00:30.29

Ok. I don't know to what extent mice have thoughts at all, but this is a rather sophisticated kind of thought, in which you categorize an experience in a thought as an experience. I doubt that mice could have that.

00:30.45

Now notice again, going back to Dharmakirti, I think that the content is something which I think in normal circumstances - as Professor Dreyfus said - is not conceptualized, but the awareness of it can be conceptualized. Because in thinking a thought to the effect that I'm experiencing a certain experiential state, you bring to bear a concept on it.

00:31.12

Again, another thing, reason to believe that it, at least can be, a much different kind of state from the content itself, one that we might not share with a lot of other animals. Another

account of awareness might be attention to the experience.

00:31.30

Now that might be a little, that might be somewhat less intellectual. Now, the key point I want to make is that actually science, especially cognitive neuroscience is making some progress on the nature of cognition and attention. And I think this has to be contrasted.

00:32.47

So we have, you know, perhaps two theories, maybe more theories of the nature of awareness. Or at least beginnings of theories of the nature of awareness in cognitive science and cognitive neuroscience. But I think if you ask the question what are the theories that are available on the nature of experiential content itself, the answer is zero.

00:32.08

None. There are no scientific theories that - at least, that's what I believe - that get to first base as theories of the nature of experiential

content. And this is the thing I mentioned, the hard problem, or sometimes called the explanatory gap.

00:32.26

Just to remind you - why is the neural basis of a given experiential content - that of red, for example - the neural basis of that one rather than another one or not. And David Chalmers has called it the problem of how to explain the content of a conscious experience in terms of its neural basis.

00:32.42

The hard problem of consciousness, as opposed to the easy problems. Well, people have bristled at that a bit - easier problems might have been a better name. Problems that have to do with the function of consciousness. So, we can look at proposed neural correlates of consciousness and see something about their functions.

00:33.03

So, we have some handle on that, but so far, there've been no proposals - in my opinion - that

get to first base on the question of what consciousness is, what experiential content is in itself. So, what that suggests is that making this distinction between the content and the awareness of the content - it's the content that makes the hard problem hard.

00:33.26

So that's my, that's the first of my three points. It's the content, not the awareness that makes the hard problem hard. Let me move to a second and related issue about physicalism and scientific naturalism.

00:33.43

So this connects more closely with things that Owen was talking about. So, I think that we see from areas of science that in many cases we can understand what some property or object or phenomenon that we encounter in the world, we can understand what it is in scientific terms, even in physical terms.

00:34.09                    So, water, for example, I think Owen mentioned, we understand that that is H<sub>2</sub>O. Light, we know, we've found out, is electromagnetic radiation of certain wavelengths. Heat turns out to be molecular kinetic energy.

00:34.28                    I think the scientific point of view suggests - although, we haven't gotten very far in investigating what experience is in the brain - that we will find the same thing. The same line of thought will apply to our experience and to the brain.

00:34.47                    So for example, it may turn out that the experience of green is a certain neural property. However, there is a problem about how that could be true that is connected with this idea that I mentioned of the explanatory gap and the hard problem. The problem is how could something subjective, like an experience, literally be something objective, like a neural property, in

the way that water can be H<sub>2</sub>O or light can be electromagnetic radiation. How could that be?

00:35.23

Well, so this seems like a paradoxical- It seems like the scientific world view just clashes with some obvious fact about our experience. Now, there is a way around this, which actually, which is I think fairly widely accepted among philosophers these days, which has its origins in some points made by my colleague at NYU, Tom Nagel, in a famous paper called "What It's Like to Be a Bat."

00:35.53

And, the basic idea of the resolution is this: We could put it in terms of an analogy that Nagel makes between our situation with respect to the physical nature of our conscious experience and the problem that a pre-Socratic philosopher would have had if someone tried to explain to him how heat could be molecular kinetic energy or light could be-

00:36.23                   Actually I think he had- Well, it doesn't matter. He had a somewhat different analogy, but anyway. How heat could be molecular kinetic energy. The problem is you need a concept, you know, that's saying heat is a kind of motion. It doesn't seem like motion. So what you need is a concept of heat and a concept of kinetic energy that makes it intelligible that these concepts pick out the same thing.

00:36.45                   So the crucial thing here is to distinguish between our concept, which is an idea in the mind about some reality, and the reality itself. So we have two different concepts of red. We have- or of heat. We have a subjective concept in terms of our experience - the thing that feels like this. In the case of heat, it's the thing that feels warm.

00:37.12                   And then there's an objective concept, which is a concept of - we believe - the very same thing in objective terms. Molecular kinetic energy. So the

idea is that the same methodology can be applied to the mind. Subjective concept of an experiential state versus an objective neuroscience concept of that same state.

00:37.37

And the idea is that the mystery can be shoved off onto the concepts from the- Instead of thinking about it as a mystery of how experience could be something physical, the real mystery is how a certain subjective concept and a certain objective concept really pick out the same thing.

00:38.03

Now you may wonder what concepts have to do with it. Well, I could appeal to a particular episode in the history of science in which people thought it was impossible that, at least one person thought it was impossible that, reproduction could take place because of the problem that we could now call - using the analogy with the Xerox machine - the Xerox effect.

00:38.28                    Which is if you make a Xerox of a Xerox of a Xerox, after a hundred generations, it becomes very fuzzy. Now, at one point, it seemed impossible that creatures could reproduce because they copy themselves over and over again for many generations without becoming fuzzy copies.

00:38.49                    So- And this has been known for a very long time. So, what they needed was a concept of DNA. And that's what Watson and Crick discovered - a concept that is, allows us to see how all these different generations without change are possible.

00:39.12                    So, the idea is to substitute a conceptual dualism for a dualism of ontology. So, the idea is we can see how the experience of green is a neural property. We can satisfy the physicalistic world view and we can also accommodate the fact that there is an explanatory gap and the mystery of consciousness.

00:39.36                   The idea is that the different concepts- It's hard for us to understand how those concepts are concepts of the same thing, but that's because we don't have the concepts well enough spelled out. Now, I have another point, but I think I don't have time, so I think I will stop.

**SUSAN CAREY**

00:39.54                   I need your-

\*\*\*APPLAUSE\*\*\*

**GARY TUBB**

00:40.00                   Thank you very much. Our next response will come from Susan Carey, who's a Professor in the Laboratory for Developmental Studies at Harvard University.

**SUSAN CAREY**

00:40.13                   I want to thank the organizers very much for inviting me. I knew nothing of the fascinating Indian philosophical tradition and was really

blown away by reading Professor Dreyfus's paper, in which he brought out an aspect of that tradition that makes it continuous with the- or highly overlapping with the Western philosophical tradition that began with the Greeks and exists today in both phenomenological and analytic philosophy.

00:40.58

Now, as he said, Dharmakirti was primarily a philosopher and his concerns were ontological and mainly epistemological. But in answering these questions, just as did the philosophers in the Western tradition, he became an armchair psychologist.

00:41.21

That is, he made assumptions about the mind, which are actually empirical assumptions. And sort of my goal here is to just illustrate with, in a very short little case study, what modern cognitive science has to say about some of those assumptions.

00:41.49                    Good. So, here is the caricature that I'm setting this up. What he said, according to Dreyfus - and I would very much like to be corrected if I have misunderstood - is that the mind is characterized by its ability to apprehend and cognize objects. That is intentionality is what makes minds different from other things in the world.

00:42.20                    And then his question is, what enables the mind to do so. And his answer is- he developed a theory of aspect, which overlaps greatly with modern notion of mental representation. And the idea is that aspects mediate between the external world and consciousness and cognition and in order to do that mediation, aspects must have some properties of objects.

00:42.47                    And he offered a resemblance theory as the answer to that. And they also must be of the nature of consciousness. That is they must be mental entities. And an aspect of the paper which Professor Dreyfus didn't summarize is that he

made a very sharp distinction between perception and cognition.

00:43.10

Perception is unmistakable. The world is given to our senses, which causally determine aspects which resemble the represented objects. And that's what grounds his epistemology. In this way, he's making a move very similar to the British empiricists.

00:43.29

And then these are interpreted by our thought processes. So there's a sharp dichotomy between perception and cognition. Perception is unmistakable and conception is mistaken. This is another aspect of the paper that Professor Dreyfus didn't summarize.

00:43.46

Conceptual categories are a construction. And he was a nominalist. He thought there was no property of dog-ness for dog to pick out. So insofar as our conceptual system commits us to

that property, it's mistaken. It's necessarily mistaken.

00:44.05

And language and language learning play a crucial role in the construction of these conceptual categories. So that's how I understand his views. I think there's a lot to say about these views. I think you can look at modern science as vindicating them to a certain extent.

00:44.25

It's a matter of detail, not of large project. Now, modern cognitive science certainly denies the resemblance theory of perception. Representations do have a dual aspect. They have intentional content, that is they do refer to things in the world. That's what makes them representations.

00:44.46

But they- and they also have a computational role in thought processes. So that's the dual aspect that he was looking for. I'm not talking about

consciousness now. I'm talking about representations that support knowledge.

00:45.00

But as I'm going to show you, the distinction between perceptual and conceptual representations is difficult to draw. But, consistent with Dharmakirti's concerns, modern cognitive science does seek to find the natural kinds among representations. Ok.

00:45.20

So, the two aspects of these theories that I'm gonna question is what's the role of language in constituting thought. And so you can ask that question - can non-linguistic creatures, animals and infants, for example, think? Now, this is actually a question that's debated in modern cognitive science.

00:45.43

There are many philosophers, for example, who think that it's- under the right interpretation of what thought is, the answer to this question

is clearly no. And how really do we draw the perception/cognition distinction?

00:45.58

So, I'm gonna give a worked example of a particular thesis in modern cognitive science that I adhere to - the core knowledge hypothesis. And I'm gonna take as my example - maybe confusingly - core knowledge of intentional agency. So this isn't- What I'm gonna try to show you is that we have - we and non-human primates - have innately representations of the content intentional agent.

00:46.26

Now, this isn't answering Dharmakirti's concerns. I could have chosen number or objects or mechanical causality, but I chose this particular one. Ok. So, what's the core knowledge hypothesis? There are many distinct systems of domain-specific mental representations that have conceptual content.

00:46.48                   That is, they go beyond sense data. Their acquisition is supported by innate, domain-specific learning mechanisms and there are innate, domain-specific input analyzers that identify the entities in those domains.

00:47.04                   So, the idea here is that there are representations that have some of the properties of perceptual representations, in that there are innately given - thanks to Darwin - input analyzers that identify the entities in those domains, but they don't represent by resemblance and they certainly have content that goes beyond sense data that you can think of in terms of phenomenal experience of things like red or shape.

00:47.38                   They're very often evolutionarily ancient and they remain constant through development. So these representational systems, which are just one kind of representation we have and a very special class of them, are never overturned

through conceptual change. The ones that babies have, we as adults still have, as well.

00:48.00

Ok. So it's an empirical claim that there are representations with these properties and I'm gonna give you an example of one such system. And the example I'm gonna give is people and other minds - knowledge of people and of their minds. Representations of people and of their minds.

00:48.17

Ok. So let me just get started right away. First, there is evidence that babies and chimpanzees, for that matter, have innate representations of faces. And there's tons of evidence - I'll just give you one experiment. One experiment - a famous one by Andy Meltzoff and Moore - is they took brand new- newborns, two-hour old babies and put them in a situation -

00:48.44

this is an older baby, but the experiments were done with neonates, as well - in which, they modeled certain facial gestures, like sticking

out a tongue, opening a mouth, pursing the lips. And what you see is that the babies imitate the gesture that was modeled. And they saw this in two-hour old babies.

00:49.07

Now, recently, Matsuzawa, who is a primatologist in Japan - this is an amazing photograph, because he's in the room with a mother and a neonate. I mean, this- Chimpanzees are very, very dangerous animals, so that's already an astonishing photograph, but what he's doing is the Meltzoff and Moore facial demonstrations. And what you see is the baby imitating the tongue protrusion, the mouth opening and the lip purse.

00:49.42

So, the conclusion from this is that humans and non-human primates must have innate representation of faces. Right? I mean, they cannot have learned these in minutes. But, these go beyond mere resemblance. Because there's an innate correspondence between the appearance of a face and their own facial gestures, right?

00:50.01                    These innate representations have a computational role. Now, what the function of this is, why they're motivated to imitate, that's another long story. Ok. Now, representations of people of course go well beyond what people look like and the gestures they can make.

00:50.21                    People are, as Dharmakirti insisted, totally different from other objects because they're agents with minds. So, is there any evidence that babies have innate representations of agents as intentional beings? So is that part of the computational role of babies' representations of people?

00:50.44                    And the answer is yes, there's massive evidence. I'll just give you a feeling for some of it. So, here's a kind of experiment that shows that babies represent agents, actions as goal-directed. That is, as directed toward something in the external world.

00:51.03

So, it's the notion of a goal that's the intentional concept in this case. Now, these experiments- The question is how do you find out whether a five-month old or a four-month old represents other people's actions, in terms of goals.

00:51.21

The experiments essentially show babies events over and over again until they get bored with them. And then they change the event to see what the baby notices as different and from that, they reconstruct how the baby was representing the event. So that's the methodology. It's very simple, because of course, you can't ask them.

00:51.44

So here's a simple experiment. Babies are habituated, they're shown over and over again a hand reaching in and grabbing a- I don't- Does that show? Oh, good. Grabbing a ball. So, they're showed that over and over again, until they get bored looking at it.

00:52.05

Then what happens is the baby is- the location of the ball and the teddy bear are switched. And now the hand either reaches in and grabs what's obviously a very different location from what the babies were bored to, but the same object. Or reaches in with the same path and grabs the old location, but the new object.

00:52.35

And the question is, to which does the baby generalize the habituation. And the answer is, they notice. They look longer. They show surprise if the goal changes and not the location changes. Now, it's not just that the babies' attention was drawn to that ball because the hand contacted the ball. Because if you repeat this experiment with a mechanical claw-

00:53.03

So, like a dishwasher sponge at the end of a stick. Now the baby dis-habituates to the different path. So it's like they can't see a

dishwasher stick as the kind of thing that can be goal directed.

00:53.24

But, now the question is well, what's the input analyzer that enables the child to identify the hand as something that could be goal-directed and not the stick. It could be that the innate person representations tell them hands are parts of intentional agents. That could be, but another thing they're able to do is to analyze the motion of these entities.

00:53.49

So if you make this stick approach the goal in three different paths - so you have evidence that it's taking different paths to get to the same goal - now, they treat the stick as if it's goal directed, as well. Ok.

00:54.06

So, I'm not gonna have time because I've overestimated how much I could do, but another kind of intentionality that babies are sensitive to is when people are making reference to things

in the world. So, they understand emotional expressions as referential. They understand eye gaze and pointing as referential.

00:54.26

Ok, those are also intentional attributions. So, the conclusions from this work is that agents are identified by patterns of contingent interaction with entities in the world. And agents' actions are represented as intentional, goal-directed and referential. And these representations go wildly beyond sensory representations.

00:54.57

I do want to tell you one little experiment because I think this shows you how rich this innate system for representing other minds is. This is an experiment that shows that babies know that seeing leads to knowing. Ok. This is much richer than content than anything I've shown you before.

00:55.19

And I can tell you the experiment very simply. It's based on the Woodward paradigm, so the

babies are familiarized with somebody putting an object into a box and then reaching into the box. Ok. So, if you're reaching for an object, you're reaching for a hidden object.

00:55.37

And then, when the person isn't looking or is looking, the object is moved to the other box. So the important thing is either the person sees or doesn't see the object moved. And then, the person reaches, either where the object really is or where the object they would think it was if the child is taking into account whether they saw it moved or not.

00:56.02

And the pattern of looking shows that they monitor all of that. That they look longer when the person reaches where that person should not think it is. Ok. This is very, very complex theory of mind that's being revealed in pre-linguistic babies and also by the way, non-human primates, show these same phenomena.

- 00:56.27                   Ok. So, conclusions. Infants have innate eye detectors, they understand the referential function of gaze and pointing. They understand that people gain information from what they attend to. And these representations are integrated with representations of the goals of actors.
- 00:56.46                   So this is a very rich inferential system of core knowledge. And it has a long evolutionary history. Ok. As I said before, the finding that human infants have representations of intentional agency is not meant to bear on Dharmakirti's questions concerning what it is about minds that make intentionality possible.
- 00:57.09                   It's just an example of a core knowledge system. But it's a example that questions aspects of his theories. That conceptualization is constituted in the course of language learning. And that there's a sharp distinction to be made between perceptual and conceptual processes.

00:57.32

But, very much- And it's a system of representation that satisfies all of these principles. But, what I want to emphasize is that these systems of core knowledge, as I said also before, differ from later, fully explicit linguistically-mediated knowledge.

00:58.02

That what is happening in cognitive science and in cognitive psychology is a research program that takes the notion of mental representation as unproblematic and is studying the nature of the format, the computational role and trying to find what the kinds are and what the right distinctions are.

00:58.24

And I think that perception cognition the way he drew it - the resemblance theory of perception is not gonna work out. But he, and in fact the Western philosophers who invented the notion of representation as well, I think are borne out by

the science in terms of their basic insights.

Thanks.

\*\*\*APPLAUSE\*\*\*

**GARY TUBB**

00:58.57

Thank you very much. Our final response is from my fellow Sanskritist, Stephen Phillips, who's a Professor of Philosophy at the University of Texas at Austin.

**STEPHEN PHILLIPS**

00:59.12

So bring your minds back to the 7<sup>th</sup> century, CE. Professors Block and Carey have done a wonderful job at showing how Dharmakirti can stimulate contemporary philosophers and engage them in coming to some very difficult problems and theories.

00:59.42

But what I'm gonna try to do is give you a sense of Dharmakirti's philosophy in the context of classical Indian thought and the opposition to

his view that we find particularly in the Mimamsa and the Nyaya schools.

01:00.07

It's really interesting that every classical Indian philosopher - my sense is, at least, that this is true - after Dharmakirti, either read Dharmakirti or at least knew of his work and it was so important that for a thousand years his opponents were occupied with trying to refute his views.

01:00.29

And, so the reason I've been included in on this is not for any philosophic talent, but rather just to give you a sense of history. Now, if I may indulge- If I may beg the indulgence of the chair, I'd like to read my paper. My response.

01:00.49

I'm not so skilled in contemporaneous presentation. I think we might get more information from me if I read it. I have a few copies here, if some of you would like-

01:01.02

\*\*\*TAPE END\*\*\*

MIND & REALITY

DAY ONE - TAPE 4 of 8 - PANEL ON KNOWLEDGE

\*\*\*TAPE START\*\*\*

**STEPHEN PHILLIPS**

00:00.00                   Professors Block and Carey have done a wonderful job at showing how Dharmakirti can stimulate contemporary philosophers and engage them in coming to some very difficult problems and theories.

00:00.27                   What I'm gonna try to do is give you a sense of Dharmakirti's philosophy in the context of classical Indian thought and the opposition to his view that we find, particularly in the Mimamsa and the Nyaya schools. It's really interesting that every classical Indian philosopher - my sense is, at least, that this is true - after Dharmakirti either read Dharmakirti or at least knew of his work.

00:01.03

And it was so important that it- for a thousand years his opponents were occupied with trying to refute his views. And so my- the reason I've been included on this is not for any philosophic talent, but rather just to give you a sense of the history.

00:01.22

Now, if I may indulge- If I may beg the indulgence of the chair, I'd like to read my paper and my response. I'm not so skilled in contemporaneous presentation. I think we might get more information from me if I read it. I have copies here if some of you would like to follow along.

00:01.51

Ok. As I said, almost every point of Dharmakirti's philosophy was disputed by metaphysical realists of the, particularly of the Mimamsa and Nyaya schools. And first of all, intentionality - this is on page two - vivaksa (ph) - which is the technical term used by

Mimamsic and Naiy\_yikas, which we might render as having object-directedness.

00:02.17

Is a relation linking cognition to things external to cognition? This is a primary topic in late classical Indian philosophy and there are many Nyaya works that have it in their title. Two, cognition according to Nyaya is irreflexive except in special circumstances such as every cognition is knowable, a cognition that is itself knowable.

00:02.43

Requiring apperception to be grasped as is evidenced by our awareness, by our sometimes being totally absorbed in objects having no awareness of our own consciousness. Three - processes of knowledge generation, pr\_mana, perception, et cetera, are not the same critters as the cognitions that are their results - pram\_. Namely, bits of knowledge, which as cognitions with vishyata (ph) are world directed.

- 00:03.10 Four - not being deceptive is an inadequate characterization of knowledge as is shown by a mistaken inference to fire where there is actually fire, from misperceiving a line of dust as smoke. The resulting cognition while true and non-deceptive does not have the right pedigree.
- 00:03.30 Five - the issue of cognition as sakata (ph) or as the realists hold along with the Buddhist Madhyamaka school, nerakata (ph), with or without form of its own or aspect is tied to that of vishyata (ph), according to Naiy\_yikas.
- 00:03.46 Six - Nyaya philosophers concur with Dharmakirti that cognition is not self-validating, arguing against Advaita Vedantans, for instance, that even if it were self-reflexive, it need not be self-validating as is shown by cases of doubt about say, a river seen in the distance for the very first time with the perception only later known as veridical.

00:04.07

That is only when we have confirmed that the cognized thing is a river by walking up closer and quenching our thirst. Seven - the distinction between perception and inferential knowledge, et cetera is not to be drawn along the lines of the one having and the other not having content, object-directedness, vishyata (ph).

00:04.27

Since for one thing, perception is commonly recognitive, suvykulpika (ph), the terminant, to use the Buddhist term. This is that pot I saw previously. Here a memory feeds a presentation of the senses. More on this in a moment. Eight - the primary meaning of linguistic science is referential. The apoha (ph) theory is motivated by nominalism, which is unfounded.

00:04.50

There are at least five further lines of argument in favor of universals as ontologically uneliminable. Nine - what appears to be a source of Buddhist error is a misunderstanding of causal relationship and the bundle or samagri (ph)

concept. Such a bundle is causally efficient, having a trigger as only one of numerous cooperating factors arriving more or less late on the scene -

00:05.14

some of which are rightly called causes in the distinct sense of a necessary, but not by itself sufficient, condition. The Buddhist proofs of momentariness fatally depend on a view of a single factor as a lone causally efficient. More about this, too. I think momentariness is the key Buddhist doctrine, at least in the classical context.

00:05.36

Ten - finally, the fact that I can remember and recognize only what I myself have experienced. This is that Bob Thurman I saw previously. Proves an enduring self. Let me slow down now to look more closely at the issue of self as locus of mental disposition, samskara.

00:05.58 I think that samskara is one of the most interesting concepts for contemporary philosophy of mind. These are the properties that account for potential memories and non-occurrent beliefs. Many contemporary philosophers of mind have a dispositional analysis of non-occurrent belief.

00:06.16 Here, the major disagreement in the classical context concerns Buddhist momentariness and the denial of endurance, especially of anything so soteriologically suspect as Nyaya's enduring self. However, my main point in dwelling on this is to bring out that in the midst of disagreement, there are broad affinities of Buddhist ideas with Nyaya and other Hindu quote unquote schools, concerning yogic and meditational opportunities, in particular.

00:06.46 In widest perspective, the Buddhist attacks on an enduring self, recorded in the sermons of the Pali canon seem to connect with spiritual exercises intended to correct false

identification with the body and mind. The idea of no self was probably meant to guide practice. As in Sankhya and Yoga philosophies and much Vedanta, also, this identification with dharma we commonly take to be ourselves - the body, thought, desires, emotions, all the phenomena in the skanda (ph), the five bands or streams - was viewed as essential to spiritual progress.

00:07.22

The medicine view of Nagarjuna, according to which doctrine is discarded when cured, is clearly in line with this. Furthermore, similarly to what is preached by Vedanta, that which is discovered in the supreme enlightenment is not a theory, but rather an extinguishing of a putative consciousness where supernal bliss, nivriti (ph), emerges.

00:07.43

One early Buddhist position that nicely makes the contrast is Sarv\_stiv\_da, which has the person as a composite of 75 dharmas, among which nirvana is one. This dharma is distinguished by being

eternal, as opposed to the fleetingness of thoughts, et cetera. Sarv\_stiv\_da did not remain mainstream, but it shows Buddhist philosophy's commitment to the value of enlightenment.

00:08.05

The common theme is that by appreciating the fleetingness of life, one is led to detachment and advancement on the path. Now, in the renewal of metaphysical reasoning that Vasubhandu represents, in contrast to the conservative anti-intellectualism of Nagarjuna, it is important, I think, to see momentariness - ksanavata (ph) - as the central doctrine - not no self, or an-atman (ph). For all things including what we take to be an enduring self or person, but not restricted to that, all things are in reality, momentary.

00:08.38

Dharmakirti puts forth the standard momentariness proofs in a consonant stream theory of the person. Objects of everyday discourse, viyavahada (ph), are temporal and spatial heaps of sualuctunas (ph) - things that are their own

marks(?). That is to say, ultimate particulars that exist for a moment, exercising causal efficiency and self-destructing.

00:09.01

The Buddhist view is often called by its- and sometimes by itself ksana-bhanga-vada (ph) - the theory of instantaneous destruction. So, two is the self or person - a composite of momentary self-destructing particulars. The intelligibility of the Buddhist theory is challenged by the question of what secures membership in the same series.

00:09.24

Against the Nyaya counterpart - enduring self view - there are a set of Buddhist arguments against the possibility of unrealized capacities. Causal sufficiency is said to secure series membership. Only the seed in the ground gives rise to the sprout. The immediate predecessor is causally sufficient and thus counts as belonging to a seed-sprout series stretching back through a line of seed moments in the granary.

00:09.48

Each, causally sufficient for a single successor in a seed stream. Naiy\_yikas hold, in contrast, that the seed is only part of the causal story. A seed being a necessary, but not a sufficient condition for a sprout. Other necessary conditions are water, soil, heat and so on, which coming together in an appropriate bundle - samagri - together produce the sprout.

00:10.12

Buddhists such as Dharmakirti deny that a mere necessary condition is properly a cause. Dharmakirti and other Buddhists endorse the following inference - that which exists is momentary, like a cloud. Yutsut kutshanikam (ph) [Phrase continues]...

00:10.30

Since with respect to Naiy\_yikas and other non-Buddhists mutually acceptable examples of co-location of the prover existent and the prabhanda (ph) momentariness - a flame, but also a stone; a

thought, but also a lake; a river, but also the sky - are hard to come by.

00:10.47

The inference is supplemented by various reductio attacks on the assumption that anything that endures could be a cause. So, we have anything x that actually causes y in the next instant is distinct from something w that does not cause y right away. No two things are identical if they fail to have all the same properties.

00:11.08

The property of producing an effect is especially important since it marks off the real from the imaginary. Arthakriyakaritva, causal efficacy - the Buddhist definition of what it is to exist. A seed sprouts at a certain moment, giving rise to a sprout. If it had endured with its property of not being sprout-producing, it would not have produced the sprout.

00:11.32

The seed that sprouts is distinct from all its causal predecessors in the granary. This is so in

virtue of the one having sprout causal power and the others, not. Only the seed in the ground, watered and warm, is sprout productive. Now, Dharmakirti and company are quite explicit about the everyday person being a causally ordered continuum - santana (ph) - causal series.

00:11.57

This is a stream united over two moments by memory impression, samskara, informing present consciousness. But how is this possible, given momentariness? The Buddhist answer seems to be that though different from what he was yesterday, Davidata (ph) can be recognized by us, who are different from what we were because our sight of him is impregnated, sagarbhita (ph), by a rich samskara series shaping our current perception.

00:12.24

The immediately preceding moment of ourselves is fecund. Sufficient to produce the current moment of ourselves. The Naiy\_yika response voiced by Udayana - or best voiced by Udayana circa 1000 -

is that memory and recognition show the inadequacy of the Buddhist reductionism.

00:12.43

If, as the Buddhist proposes, self and personal identity reduce to a series of psychological events held together causally, the temporal gap between the original experience and the later remembering cannot be explained. What happens to the information during the period when there is no awareness of it? The samskara, as beneath the threshold of consciousness is unavailable to Buddhist presentism, according to which every moment of awareness is self-aware, self-intimating, self-reflexive.

00:13.13

Similarly, the Buddhist is forced to view deep sleep not as an absence of consciousness, but rather as a period when the consciousness stream is composed of moments of self-consciousness without object-consciousness. It the lack of object-consciousness that is supposed to account for our inability to remember.

00:13.30

But Udayana brings out that all remembering presupposes a psychological gap – a period when the information gathered by the original experience is absent from consciousness. In the Nyaya view it lies latent in the self as the content of a mental disposition – samskara.

00:13.47

Desiring to possess or avoid something of a type remembered would be impossible in the Buddhist theory, the realists claim. Two, as well as recognition, which permeates our mental life. Also impossible would be comprehension of a sentence, which though its words are uttered sequentially, is a single thought. But note then in broader perspective, both theories find continuities beyond the body and anything material.

00:14.13

Buddhists share with Hindus beliefs about karma and reincarnation and the centrality of virtuous action. Even without admitting itself as locus of

mental dispositions, Buddhists view causal connections as running past death. Causal sequences are not embedded exclusively in the physical body.

00:14.32

The primary support for this view is taken by the classical philosophers of a yogic perception - yoga-pratyaksa (ph) - which is admitted by Buddhists and Hindus alike, though there are other arguments. And I think that both Bob Thurman and Mark Siderits are gonna talk about this. I think this really is the, if not the key, one of the most important issues for us.

00:14.56

Recall Dreyfus's appeal in his paper. He makes this appeal to: "meditative evidence in support of the Buddhist position on the nature of the distinction between, as it were, concept-free perception and concept-laden inference. There are, of course, disagreements about what Yogic perception shows. But almost everyone sees it as comprising a kind of direct acquaintance with

samskara, some of which are known not to have been formed in the current lifetime.

00:15.23

Indeed, the Yoga Sutra distinguishes samskara which are new to a given birth and those called vasana (ph), which range over multiple births. I believe just about all Buddhist philosophers accept a similar conception. Thank you.

\*\*\*APPLAUSE\*\*\*

**GARY TUBB**

00:15.45

Thank you very much. Yes. I think before we turn to taking questions from the audience, we have a few things to discuss at the table. And to begin with, since Professor Dreyfus was brave enough to present himself as a target, I'd like to give him an opportunity to respond to some of the comments that we've heard from the others.

**GEORGES DREYFUS**

00:16.11 I'm tempted to take down the jacket and start the debate, but I will refrain from that. Thank you for these wonderful responses, which I think span over a whole range of issues. Obviously, I think there is a real difference that I want to make about Dharmakirti as he was in his context and how we can take him to mean.

00:16.35 And I want to make the distinction quite clear. In my paper, I tried to remain quite closely, to stay quite closely to what Dharmakirti said in his own context. And therefore, your point about the- Susan's point about the resemblance, the conflict in a way, or the tension between the resemblance theory and the importance of conceptual schema, I think is exactly to the point.

00:17.03 In fact, Dharmakirti has a view that there is a similarity between the akhara (ph) and the external world. But that view, actually, gets questioned in Dharmakirti's own works. And so, I

think, if I were to take when he goes, Yogacharya and so on. And so when- if were to take Dharmakirti in a kind of modern context are we definitely agreed with Susan and say we don't really need resemblance theory. We do need a theory of representation and an understanding of how representation, articulate where conceptual schema.

00:17.45

And so that's a view which I think Dharmakirti, you know, is in a way pointing to because I think Dharmakirti has a different understanding that what is given to the senses when, say for example, Locke or other British empiricists. So, this is my first remark.

00:18.03

One thing that I- One inconvenient of trying to summarize my paper is it left plenty of things out. And, one of the things that I left out is the issue that Ned raised, which is the question of the content of the consciousness and how we become aware of that content.

00:18.27                   And on that, Dharmakirti has a very clear view. Which I summarize in my paper. But which is that awareness is inherently reflexive. And by reflexivity, here, I do not mean reflectivity – that is for Dharmakirti, and here this is where the Dharmakirtian Buddhist and the Naiy\_yika, in a way part view.

00:18.54                   For Dharmakirti, the reflexivity is not due to a thought process, but there is a direct element of awareness in the cognitive process. Which, for Dharmakirti would be probably present in mices (sic), dogs and cats and which is clearly- which is the basis for reflectivity. That is the thought process, which then takes representation as its object.

00:19.22                   So, Dharmakirti has a very, very clear doctrine on that, which is that every perception is reflexive. And this is what he means by self-cognition. Self-cognition – there is a big debate

on this topic in India, obviously, and Stephen has a brought up very eloquently the Nyaya side. And for Dharmakirti, self-cognition is not a separate cognition.

00:19.50

It's not a reflection on the representation. It's an inherent part of every mental state. Ok. So, these are some of the points I wanted to make. Also, I think Susan's point about the role of language, I think is in the present context, extremely important and well-taken.

00:19.17

I think as far as Dharmakirti and the Buddhist tradition, I do not think that there is any elaborate discussion of whether all concepts are linguistic or not. I think their view is - as you have characterized it, rightly - is a nominalistic view. And therefore, it is committed to the idea that natural types are a production of our interaction with the world, rather than existing out there.

00:20.42                   How this interaction is parsed, obviously, is something else and I think let Dharmakirtian philosophy has a great deal to learn, or is quite interested in this dialogue with cognitive scientists and philosophers, because indeed, there is a lot more to be learned about how the- what's the role of language and what is pre-linguistic.

00:21.12                   And so, I think your analysis really helps here. Finally, as far as Stephen Phillip's content, I thank him very much for his paper. I'm obviously tempted to engage into fierce debate, but I will not do that. I think it is important that you brought out a really important point, which is the danger of a dialogue like this one is to kind of rarify and isolate Buddhist thought as being this kind of number one, like the best thing that India produced.

00:21.44                   Or this kind of monolithic entity that it's supposed be. And obviously, it's not like this.

The Buddhists were part of a very lively philosophical dialogue and Stephen brought out very well some of the issues. It's clear that there is a very deep opposition, which is running between both science and maybe a little bit of bad blood. So, in fact, I'm not aware that there is actual violence, but there is externally virulent controversy.

00:22.15

Often, Indian tradition is represented as this wonderful ecumenical tradition. It's true that as far as we know, people didn't seem to fight, but they were quite at each others' throats, at least in the metaphorical sense of the word. And so there is this very vigorous debate, opposing a realist tradition like the Nyaya and the Buddhist, which I think you have aptly characterized as nominalistic.

00:22.41

And, for example, one very interesting issue which you bring is precisely this- the question of savikalpa (ph), kalpica (ph) or pratyaksa,

whether perception is - as Dharmakirti argued - just a kind of bare sensing, or whether there is already a great deal of articulation which is happening at the perceptual level itself. And I think that's a very lively issue as far as I'm concerned.

00:23.08

I could describe myself as modern Dharmakirtian. So, that's at least in this context here - so that's, I think, what I wanted to say. And I thank my co-panelists for these very thoughtful remarks.

\*\*\*APPLAUSE\*\*\*

**NED BLOCK**

00:23.30

Actually, I just I want to ask a question to Stephen Phillips, just to make sure I understand this. So, in your item 2 you say that according to the Nyaya, sometimes we're totally absorbed in objects, having no awareness of our own

consciousness. So, I take it that the Nyaya disagree with Dharmakirti.

**STEPHEN PHILLIPS**

00:23.51 Absolutely.

**NED BLOCK**

00:23.53 We were just told Dharmakirti's view is that awareness of an experiential state is an intrinsic part of it. So, the Nyaya disagree with that.

**STEPHEN PHILLIPS**

00:24.01 Absolutely. Though, we can become in apperception, aware. But that's a separate act.

**GARY TUBB**

00:24.15 Are there any counter responses? Anything you'd like to say? Let me ask one question. There is one- Without- I don't mean to provoke debate in the face of remarkable forbearance, but I do wonder what Dharmakirti would answer to the point

that Steve raised about- on the topic of memory, with the problem that the Naiy\_yika mechanism of memory, the samskara, is theoretically unavailable.

**GEORGES DREYFUS**

00:24.47

This is one of the deep problems of Abhidharma traditions, on which Abhidharma traditions have debated a great deal. Some of these philosophers, such as Chandrakirti (ph), were willing to bite the bullet and say, we don't need any mechanism. There is no reason to have a mechanism, it's just causal. Period. You don't need to talk about the psychological mechanism.

00:25.14

Some somebody was quite willing to say it. To bite the bullet and say, look, you're right. We don't have a mechanism because we don't deal in mechanisms. All what we need is a process of cause and effect, which is vastly more complicated than what the human mind can

comprehend in its totality. And that's what we are happy to sit with.

00:25.33

Most, I mean all Abhidharma traditions – I mean this is Chandrakirti, who is a Madhyamaka in this and certainly cannot be accused to be an Abhidharmist. All of the Abhidharmic, Abhidharma traditions have attempted to provide various answers to this question. In fact, that's one of the crucial points on which they disagree. Some in the Sāvastivāda (ph) Abhidharma, we have notions like prāpti (ph), which is supposed to be like death recognition, which is contained by the stream of consciousness.

00:26.08

I think in the Tibetan tradition, the answer which has been most favored is a kind of Yogacharya, post-Yogacharya answer, which argues that the mind existed at- There is two levels of the mind. There is this operative mind, level of the mind in which the mind engages with the external world. And when- or with itself, with

thought. And then there is this kind of subliminal level of the mind. This basic level of the mind, which the Yogacharyan called laya-vijñ\_na, stored consciousness.

00:26.44

And that's where the kind of continuum that would hold the memories and propensities that Stephen Phillips talked about. And I think the term samskara is indeed, very, very important here. Because it is a question of propensities and memories, and so on.

00:27.04

And so vialaya (ph) is really the Yogacharyan answer. But it's an answer which is kind of incongruent with the answer of most Abhidharma traditions.

**GARY TUBB**

00:27.20

Well, it seems to me that my prospects are slim of provoking fisticuffs directly on the dais. And we'll have a chance to attempt that at lunch among ourselves, so I think I'll turn to some

questions from other people. Annabella, am I-  
Should I read the questions to myself or have  
they-

00:27.42

The first one is actually from a panelist - Anne Klein - who I think is sitting in the corner. And congratulates us on a rich and coherent panel. Here's the question. Collectively, your discussion suggests we may be wrong in drawing too hard a line between perception, cognition or subjective states and objective neurological phenomena.

00:28.12

For Buddhists, as Professor Dreyfus has said, whether the akara (ph), which I think you translate "aspect," is in the subject or the object is a very difficult question. My own sense - and compare here the discussion of akara (ph) in knowledge and liberation - is that this difficulty, like the difficulty of clearly determining mind's relation to matter and so

forth, is itself a very compelling feature of mind.

00:28.45

That we will not be well aware of mind properties without someone incorporating this mysterious or elusive element as a central property of consciousness itself. Please comment.

**SUSAN CAREY**

00:29.03

Oh, I'll start. There's two distinctions here. There's the distinction between perception and cognition and there's the distinction between representation and the thing represented and you get- Those are really two separate issues. So, as I take- So, for sure we're I think, we're all agreed for the sake of amity on the panel, that we're not gonna understand the mind without being able to think about the relationship between the mind and the external world. Because that's what it is about minds, among other things.

00:29.47 they represent the external world, whether lines are material or immaterial and how that works, that's a very hard question. And the answer given in cognitive science is actually very similar to the answer that Leah states in Professor Dreyfus's exposition. That was given in, you know, 700 BC in this- AC, AD in this tradition.

00:40.18 But, and the distinction between perception and cognition is a distinction among mental representations. Alright? And in this particular case, it was a very important theoretical distinction in his, because of the epistemological work that perception did. And because perception was unmistakable and conception was mistaken.

00:30.44 I mean it was- it does a lot of work, that distinction. So, blurring that distinction or wondering whether those are the right natural kinds is a current research project in cognitive science. And that's a separate issue from the

much hairier one, which is the ontology of mental representations and how mental representations relate to the world.

00:31.08

There's a- maybe it's not as big a gap as the hard problem of consciousness, but the problem of how we- how it's possible that we can be in a referential thing, referential relation in the world is a really hard problem that's, I don't think, easily, has been solved.

**NED BLOCK**

00:31.31

Just a word on the perception/cognition distinction. What? Perception- Well, ok. So, that makes the point I'm making rather obvious, which is that perception doesn't require any concepts. Cognition does require concepts. In fact, that's what we mean by a concept - is an element of thought.

00:31.56                    So, it seems to me there's a very clear distinction between perception and cognition and the role of concepts in it.

**GEORGES DREYFUS**

00:32.08                    For Dharmakirti, what I was talking is perception and conception. Not perception and cognition. So, let's be very clear on that. And you're right, there is a real issue whether you want to draw this sharp dichotomy that Dharmakirti does. But I- And obviously, I think here cognitive science is going to probably change the debate-

00:32.36                    -in providing a much richer analysis. When I read neuroscience, I'm told that there are about 25 brain centers, which intervene in the process of vision - or 30 or something like this. And so, it's clear that there is- vision is a whole process of construction and that whether you can really draw these sharp boundaries or not is going to be a question that could be amenable to

interesting- and is going to probably to be amenable to interesting investigation.

00:33.11

I think, however, from a kind of philosophical perspective, a great distinction, I think, is defensible. And so, I think yeah - that's why I would leave it there. I think the question of unmistakenness that Susan brought is more problematic. And I think in fact, Dharmakirti- that's a part of Dharmakirti's work that he kind of brushed to the side that some part of his work.

00:33.42

Because he held in final analyses that perception is mistaken. But for the sake of simplicity, I think, it is clear that this is a problematic issue. Especially- his position especially if you take, if you kind of move in the sense that I think is more interesting, which is to see how perception and our conceptual schema are articulated to produce knowledge. At which point,

the constructive projects become more interesting than a purely epistemological one.

**STEPHEN PHILLIPS**

00:34.21

Let me say that from the Nyaya perspective, they would say that in philosophy the distinction is indefensible, since the point of mentioning perception is to justify a position. So when I say this is my friend, Professor Tubb, or even I recognize this is a piece of paper, that's a perception.

00:34.52

I'm expressing a perceptual cognition and it has the status of valid bit of knowledge because it has been generated in the right way. And so, it's not a defensible distinction, at all. You know, I recognize my friend and I recognize the piece of paper perceptually.

00:35.17

Of course, concepts feed perception. It is suvikulpika (ph) pratyksa. Nevertheless, it's in the epistemological context - the whole point is

to cite our evidence for our views. And we can't get beneath that. We start with such claims.

**GEORGES DREYFUS**

00:35.45                    You really taunt me into getting- taking off my jacket and- This is great because you know, in Tibetan theories, there's a proverb that - tunna kevanin (ph) - only idiots agree. So it's good that we have disagreement. I think I would respond very briefly that for Dharmakirti, recognition is precisely conceptual.

00:36.10                    And this is why he makes this distinction. It's not the case that we recognize something perceptually; rather, it is a case that you have akara, which- when you recognize as this and that. So, recognition is clearly conceptual. It's not perceptual. And this is in fact one of the issues, maybe.

**SUSAN CAREY**

00:36.33                    Can I just- Can I say something?

**GEORGES DREYFUS**

Yes, please.

**SUSAN CAREY**

00:36.36

I think that with- from the point of view of modern psychology that the distinction that you're after is called the distinction between sensation and on the one hand and perception and cognition on the other. And I think that is a defensible distinction. That in computational terms, in sensations, there are no constancies.

00:36.58

So, so, there are not- they don't have the same degree of aboutness that both perceptions and perceptual representation- what we want to call perceptual representations and conceptual representations, do. I myself do think that there is a distinction between perception and cognition that can be drawn, but it's a different one from that.

00:37.16 But, that's the whole point. The point is that if you take this enterprise seriously, you're trying to find the right distinctions among kinds of mental representations that are gonna do some explanatory work in how the mind actually works. And it's very much a work in progress.

00:37.33 And it will be constrained by cognitive neuroscience, also.

**GARY TUBB**

00:37.41 We have not nearly enough time left to deal with all of the questions that have come in. I think what I'd like to try to do next, and we'll see if we have time left after this, is to read one question directed specifically to each of the four panelists. And I'll start with one more from an upcoming panelist, Edith, and this is for Professor Dreyfus on intentionality. Could intentionality-

**GEORGES DREYFUS**

00:38.11 I was afraid of that.

**GARY TUBB**

00:38.12 Yes. Could intentionality be understood in the manner of Western phenomenological philosophy that is that of Husserl? Consciousness aims at its object, but he said- he added the concept of bracketing, the putting out of play whether the object exists or does not. A procedure that, for him, offers a truer representation of the object. In sum, cut out the existential claim, get to the object.

**GEORGES DREYFUS**

00:38.43 Well, this is something I was afraid of. That Edith, who knows a hundred times more about intentionality, would ask me a question. So my fears have been realized. So, let me say at the outset that I really don't know very well, Husserl. And so, I find it difficult to really engage and I am trying, in fact, to learn more about Husserl.

00:39.06

And, you know, when professors want to learn something, they teach a course. And this is- at least that's what I do and that's what I supposed to do next year. So, ask me this question next year. I might have a much more articulate answer. I would think that, however, if we were to compare Dharmakirti and Husserl, that is not talk in broad Dharmakirtian terms, but more specifically about what Dharmakirti had in mind-

00:39.35

-it remains the case that for Dharmakirti, his main project is epistemological. And it's not- the phenomenology's only one part of the aspects. So, to read Dharmakirti as a phenomenologist I think, is actually to misunderstand what he's trying to do. Phenomenology's clearly there. As it is in many parts of the Buddhist tradition. But it's not what the goal, what the main project is about.

00:40.01 I think the main project is clearly to talk about pramana (ph), that is valid cognition of knowledge. And therefore, in this context, it remains an important issue of to which degree various forms of knowledge are grounded or are related, maybe, - to use a weaker term - are related to realities.

00:40.22 And so, I think what Susan was talking about, that is the degree to which various forms of cognition are constrained and so on, I think is important. And would be a kind of Dharmakirtian way to talk about- to take the conversation in a modern context, while still insistent that for this enterprise the relation with the extended world becomes, is still part of the project.

00:40.53 So, I think this is really a different approach. But, I think I might do much better one year later, a year from now.

**GARY TUBB**

00:41.04

Next, a question for Susan on input analyzers. I have a strong habit of seeing a strong distinction between cognition and perception. So, my impulse was to see your discussion of input analyzers, et cetera, as a confusion of cognitive things with fundamental elements of perception. However, I get the feeling that you're asserting these things - that is input analyzers - are essential to the process of perception and inseparable from it. Is that correct? Could you explain?

**SUSAN CAREY**

00:41.33

Yeah. The claim is that in these classes of representations - core knowledge - as I said, there's not an infinite number of domains of core knowledge. We know there's good evidence for core knowledge of objects and mechanical causality, as part of that. There's good evidence for this one that I mentioned here. Good evidence for core knowledge of number. And that's it, right?

00:42.03                    So, it's not all of knowledge, by any means. But what characterizes these systems of knowledge is that there are actual innate perceptual analyzers that take spatial, temporal and sensory information and output representations that have the content something like goal. Right?

00:42.24                    So, it's not a confusion between them and perceptual representations. It's a claim that there are perceptual analyzers that output these representations. And what makes them conceptual, have conceptual content then is their conceptual role and the fact that they don't look like- at all like sensory representations.

00:42.43                    So, it's deliberately a middle architecture. And the idea is that for these domains, which are so evolutionarily important - and you know, Darwin or Mother Nature built perceptual analyzers that outputted representations into central cognitive systems, with that content. And so we didn't need to learn- we don't need to learn, we don't need

to construct a representation of an agent through the kind of process that Dharmakirti's talking about - learning the concept of cow. We just don't have to.

00:42.18

It's an empirical claim. And it is really, really important that that's not how most of cognition works, right? Most of cognition, there's a very deep inferential depth between what the output of our sensory analyzers are and the identification of the entities in the domain.

00:43.45

I mean, take for example how we identify atoms. Alright, there's no innate input analyzer that tells us how to read a cloud- you know, the tracks on a cloud chamber. So, the point is this is a very special kind of knowledge, but it's the - if the claim is right, it's an empirical claim - this, these are really central ontological commitments that we have as human beings -

00:44.11 to there being agents in the world, to there being middle-sized objects in the world. And, it's not an ontological claim that there really are such things, but that our minds are prepared to see them. We don't construct them through language and cultural construction. Darwin constructed them.

00:44.28 And that's one natural kind of representations in the world. But, by no means, that's not supposed to be a characteristic of most of our conceptual representations.

**GARY TUBB**

00:44.42 Thanks. I think we'll try to complete our sweep of the table somewhat expeditiously with two more questions. And first, one for Ned Block that will be difficult to answer briefly, I think, but we'll see what you can do. What would a concept be like which would be common to the subjective and objective? How would we come up with it? And

if there are non-linguistic concepts, might we already have one, but be unable to explicate it?

**NED BLOCK**

00:45.17 I don't know quite what to say about that.

**GARY TUBB**

00:45.19 Perhaps you just can't explicate it.

**NED BLOCK**

00:45.26 I mean, look, what I meant by subjective concept and objective concept was such that there weren't any concepts that were both. I meant by subjective concept a concept that has an experiential element, like the concept of a state that feels like this. And by an objective one, I meant, for example, a scientific concept.

00:45.48 So- Yeah, like a brain state concept, for example. So the idea was that these two different kinds of concepts on the physicalist point of view pick out the same thing. But, I guess it'd

be, you know, almost an item of definition that there aren't any concepts that are both. And I wouldn't- you know maybe somebody can think of something, but nothing comes to mind off-hand.

**GARY TUBB**

00:46.09

And the non-linguistic concept?

**NED BLOCK**

00:46.14

Well, I think that the subjective concepts can certainly be non-linguistic. It's hard to imagine a scientific concept that's non-linguistic.

**GARY TUBB**

00:46.27

For Steve Phillips- Yes, go ahead.

**ALAN WALLACE (?)**

Can I follow up to what Ned just said?

**GARY TUBB**

Sure.

**ALAN WALLACE (?)**

00:46.36 The answers that you got about-

**NED BLOCK**

Why don't you just use this one? Here, just use this one.

**ALAN WALLACE (?)**

00:46.52 It's just a direct follow-up and I'll be very brief. The very nice way you put the sort of problem could be interpreted in two different ways. One is that there is a sort of objective conceptual problem between the objective concepts and the subjective concepts.

00:47.19 Another one could be that we are so used to using those concepts in two different language games, which actually are part of a tradition, which makes us think that they can't - as it were - bind or meet.

00:47.42 So, I mean, for example, work you know - Colin McGuinn (ph) says, there'll never be a satisfying

way of binding the objective with the subjective.  
But one might distinguish between a satisfying  
solution and a satisfactory solution.

00:48.03

Where I have in mind by a satisfactory one – it  
is still puzzling that heat is mean molecular  
kinetic energy and that gold has the atomic  
number- I mean, you know. But after a while you  
learn to speak in both voices. So, my idea here  
would be to give partly a social account of the  
problem.

**NED BLOCK**

00:48.28

In Oxford philosophy in the '60s, which was very  
oriented towards ordinary language, people would  
say things like, well, it just doesn't make any  
sense to say that water is H<sub>2</sub>O. It's just like  
the word water and the word H<sub>2</sub>O together in the  
same sentence seems somehow objectionable.

00:48.48

And I agree that just by getting used to it, it  
can seem less objectionable, but as Tom Nagel

emphasized, the problem we have is understanding how a subjective concept can link back through however we think reference works - like causal chains or something - to the same thing that an objective concept links back to.

00:49.16

And that's not a matter of getting used to it, that's really a matter of having a story of how that's supposed to work.

**GARY TUBB**

00:49.24

I think we can only manage to squeeze in one last question, if Steve Phillips can answer it fairly quickly. The question you've all been waiting for. Why do you consider Nagarjuna anti-intellectual? And a general comment that goes with that - discussion of Buddhist assertions juxtaposed with Western views seems stifled by the absence of any description of the doctrine of the two truths.

00:49.42 But this distinction is obviously need to contextualize any Buddhist comments on science. And this need was obvious during Owen Flanagan's discussion of the Dalai Lama's science-centered meetings.

**STEPHEN PHILLIPS**

00:50.08 Well, Nagarjuna feels anti-intellectualist. As you probably know, there are within Buddhism, two main interpretations of Nagarjuna - the Svatantrika and the Prasangika. The- Prasanga (ph) means objection. And at least to his adversaries, Dharmakirti- I mean, sorry, Nagarjuna was much more famous for the objections, the challenges that he put forth to their metaphysical reasoning.

00:50.43 Now, if you look at the Mulamadhyamakakarika - as ably translated by Jay Garfield - you'll see a lot of metaphysical arguments. And so, indeed, it seems to me that the Svatantrika reading where Dharmakirti does put forth some reasoning in

favor of his view, and indeed supports two truth  
position where-

00:51.14

And indeed, within the, our world that we need  
certain guides, intellectual guides in order to  
bring our practices to their fulfillment is  
absolutely crucial. And so, yeah, I stand  
somewhat corrected. I was writing mainly from  
sort of a sense of, you know, the broader context  
of Indian philosophy, where Dharmakirti is much  
like Socrates.

00:51.46

He challenges his opponent to come up with better  
arguments.

**GARY TUBB**

00:51.53

Thank you. I think we'll end this panel with that  
and I'd like to remind all of you to come back at  
one o'clock in time to check in for two afternoon  
panels on experience and wisdom. So, we'll see  
you there.

Mind & Reality  
Day 1 – Tape 4 of 8 – Panel on Knowledge

\*\*\*APPLAUSE\*\*\*

\*\*\*SESSION END\*\*\*

00:57.00

\*\*\*TAPE END\*\*\*