

Posthumanism: An Introduction
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Lecture 42
Lec 42 : Posthuman Sports

Hello everyone. This is Pramod Nair from the Department of English, and here we continue our studies of post-humanism with a more particular focus. We have already studied in quite some detail the theme of post-human biology and post-human bodies. We have looked at cyborg cultures and cyborgs. We have looked at bio-art, which foregrounds the intersection of the organic and the inorganic.

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We have been exploring:
Posthuman biologies
Posthuman Bodies
Cyborg cultures
Bioart

We have further examined:
the hybridization of the Organic and the Inorganic
the intersections of the Corporeal and the Moral

Human biology is not a unique, self-contained, hermetically sealed ecosystem. It is a congeries, an assemblage.

That leads us to the question of ethics of enhancing human bodies, of thinking and performing better.

Enhancement, as we have seen in previous lessons, is the process of transcending the limitations of the human biological or corporeal form.

Transhumanists strongly believe that the human body is a limitation, and *one way* to overcome such a limitation is enhancement.

Moral Enhancement and Contemporary Literature: Octavia Butler's Hyperempaths

We have looked at enhancement biological, as in corporeal and moral. We have also, across the spectrum of post-humanist theories, noted that human biology is not a unique field. A self-contained, hermetically sealed ecosystem. We have emphasized throughout the fact that human biology is a congeries, an assemblage. We have noted the problems and ethics in enhancing human bodies to perform better, to think better, to become better musicians or mathematicians, or whatnot.

So enhancement has been seen, as we have noted, as a way of transcending the limitations of the human biological or corporeal form. Particularly in the case of transhumanists, there is a very strong belief that the human body is a limitation and that One way around this limitation is to enhance it through technological prostheses, through chemical stimulation, through permanent changes which will be transmitted from generation to generation in the form of genetic manipulation and genetic engineering.

The point that the transhumanists make is a fairly simple one. We have evolved; humans have evolved from a very primitive physiological and anatomical form to what we are now.

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The point transhumanists make:

- We have evolved *across millennia*.
- Nature selects the fittest for survival (adopting Darwinian theories).

Transhumanist questions:

- Why should we leave it to nature to help us overcome our limitations?
- Why should we wait for millennia when we can enhance ourselves at a faster pace?
To look better, to develop sensitivity, to perform better, to be faster, to think better, to be physically stronger, may be perceived as achievable goals within our control.
- If the body is a nuisance, if the body is a bother, why should we not enhance it?

Transhumanists believe that there is no need to be constrained by limitations of structure and processes of anatomy, physiology, and so on. The ability to evolve into something more/better is something we should harness and take charge of through technological, pharmacological, and genetic means.

Moral Enhancement and Contemporary Literature: Octavia Butler's *Hyperempaths*

All life has evolved. We emotionally see the single-celled organism become a multicellular organism and so on and so forth. So, humanity evolved over several, several, several millennia. Humanity evolved to adapt a very well-known theory from Darwin: nature selects the fittest for survival. And those that are unfit for nature or do not fit the natural requirements for survivorship pass away.

For transhumanists, the question is: why should we leave it to nature to help us overcome our limitations? Why wait for millennia? To become better, to move faster, to think better, to look better, to be more muscular, healthy, with greater powers of the immune system, with greater musical sensitivity, and so on. So for transhumanists, their body is a little bit of a nuisance. It's a little bit of a bother.

And their bother must be overcome. So if you were to chat with a transhumanist, they would tell you that there is no need for us to be limited by our bodily structures, by our bodily processes, anatomy, physiology, or whatever it might be. That the ability to evolve into something more, into something better, is something we should harness as in, we should take charge of. So we take charge via technological, pharmacological, genetic, or whatever it might be technology that you want to enhance.

Ourselves. So the enhanced body is a major post-human theme. And you do know that in the case of cyborgs, which is arguably the most popular dimension or aspect of the post-human, as we know it from cyborg films. But there are also problems. And one domain in which this has become so central is post-human sport.

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The enhanced body is a major posthuman theme.

Cyborgs: arguably, the most popular dimension from cyborg films.

Another domain that makes this clear:
Posthuman sports

Athletes with prosthetic limbs competes successfully against the "normal body" or the able-bodied.

Oscar Pistorius : Blade Runner (reference to the cult film)
Marcus Rehm : Blade Jumper
Lis Hartel : Equestrian
Neroli Fairhall : first paraplegic to compete in Olympic Archery
Natalie du Toit: finalist, 2002 Core Commonwealth Games, 100 m freestyle

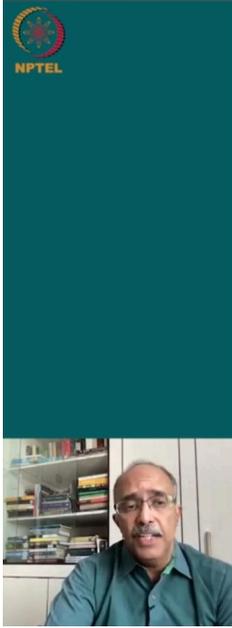
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And this has become more prominent with the arrival of figures and sportspeople like Oscar Pistorius, who is nicknamed Blade Runner. Because he doesn't have feet; he has shoes fitted with blades. So it's blades rather than feet. And that's why he's called Blade Runner, which is, of course, a cult film. It had a reboot in the more recent past as well.

Athletes with prosthetic limbs have for a very long time competed and competed successfully against 'normal' bodies, against able-bodied athletes. Marcus Rehm was called the Blade Jumper. Lee Pearson was an equestrian. Neroli Fairhall was the first paraplegic to compete in the Olympic Games in archery, actually. Natalie du Toit qualified for the finals in the 2002 Commonwealth Games in the 100-meter freestyle.

What do these tell us? In all these cases, the athletes have modified their bodies with prosthetic limbs, right? Now the problem has been for, say, the International Association of Athletics Federations, they said the use of any technical device springs, wheels, or other things that provides the user with an advantage over another athlete cannot be used. So if you have an additional advantage,

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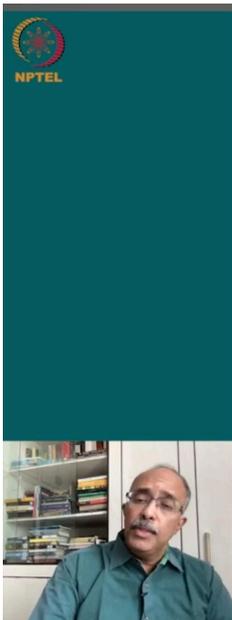
Athletes with modified limbs posed a problem for the International Association of Athletics Federations
Use of any technical device (springs, wheels, etc.) that provides advantage to the user should not / cannot be used
– an additional device that gives you an advantage is not acceptable.

Such a rule such as the IAAF's essentially says: Humans need to remain natural in their competition.

Moral Enhancement and Contemporary Literature: Octavia Butler's Hyperempaths

a device attached to yourself that gives you an advantage over somebody who doesn't have that device, that's not acceptable. So you cannot use things that give you an advantage over others. Which essentially says that humans should remain natural in their competition. But this rule invites two questions. Are athletes enhanced humans when they have prosthetic devices?

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The rule, therefore, raises a few questions:

1. Are athletes enhanced humans? Are they above average humans, and do they enjoy an additional advantage? Did their prostheses give them more/clear advantage?
2. On the other hand, we do know that commercialised convergence of bodies and technologies already work together to enhance performance, and there are new cultures of sport which are inevitable. We now know of the field of Biomechanics that strives to improve performance through measurement, training, and even modification of athlete bodies.
3. What about trainers, training technologies, nutrition, clothing, machinery etc.?
4. How do we look at Protection from injuries with special attention to physiological/anatomical feature that contributes most to the participation in the sport?
5. Does only physical/visible 'addition' comprise enhancement in sports?

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As in, are they above-average humans? Are they humans with an additional advantage of some kind? Did their prostheses give them a clear advantage? We do know now that there

is already a commercialized convergence of bodies and technology, right, which works together to enhance performance. And there are new cultures of sport that are inevitable.

We now know that there is a field called biomechanics, which strives to improve performance through technology. The measurement, modification, and training of athletes' bodies. Now, some of you may be aware that people competing at very high levels athletes and other sportspeople have trainers, right? And people train them.

They also use a variety of additional services, whether it is nutrition, clothing, or machinery, like gym equipment, and those that measure every part of their body's movements, which is basically called biomechanics, right? So, we know that... The flexing of their muscles when you throw something, the flexing of your muscle here, the angle of your neck, your shoulders, your body, the place at which you move these are measured and placed under very rigorous training. For example, athletes who use their shoulders in sports like javelin, archery, shooting, or volleyball need these segments trained. The footballer has the lower torso focused upon.

Their overall physique is also trained. I am not saying that they are trained in segments, but special attention is given to these. It could be for protecting them from injuries, but it also means that the physiological and anatomical features that contribute most to their participation in the sport must be enhanced. So, they may not add anything.

They may not have a special device attached to it. But can you say that these are not enhanced bodies? More and more people working with commercialized biomechanics have been speaking about the brave new sport. or future enhancement games, which follows the structure of the Olympic Games, but they have very different views about the use of technology. Now, we also know something else, and this is something we are all aware of.

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Commercialised biomechanics\

"Brave New Sport" - following the structure of Olympics, but different rules based on enhanced sporting bodies

- Mental conditioning
- Temper
- Resilience
- Toughness
- Practising Meditation
- Concentration
- Strengthening of focus, determination, and intensity of concentration

Are they enhancements? The above are not included under *prosthetic devices*, though.

We tend to think enhancement of a sporting body when we add chemical nutrients to the body – when a chemical attachment, like doping, is detected.

What about mental conditioning? Is being tougher/calmer a form of enhancement to compete at higher levels?

What about a chess player who trains for a number of hours, learns and practises millions of possible moves, memorises moves and their history and tunes the mind to focus and strategize?

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Personnel competing at very high levels... also do a lot of mental conditioning, right? So that they don't give in to pressure, they keep their tempers, they are resilient, they are to be both commonplace, right? Tough, right? They practice meditation, they practice concentration, they practice whatever is required to strengthen them mentally as well.

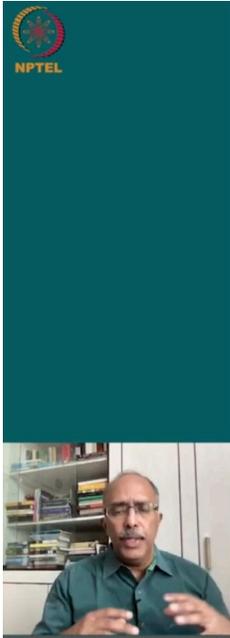
So focus and determination and intensity of concentration are also worked upon. Now think about this. Are such athletes or sports persons enhanced? Would you call it enhancement if they are not using prosthetic devices like these wires and cables and things, but instead they are just training their bodies and their minds? Would you say they are enhanced?

Now think of the particular moral dilemma, ethical dilemma of this question. We seem to think that enhancement is only when you add chemical nutrients to your body, which is called doping in sports, when you attach things to your body and then run or play basketball or whatever it might be. Is mental conditioning enhanced or not? When you become tougher to compete at high levels, when you become

calmer to work at higher levels of competition, is that a form of enhancement? The number of hours that a chess player spends training their mind to be focused, to remember, to memorize the millions of possible chess moves and moves from history, what, say, Garry Kasparov and Anatoly Karpov did decades ago, to move along similar lines, to move the pieces similarly, to strategize. Is that an enhancement? Where they're training their minds to pay more attention, to be very decisive in their movements and strategic calculations.

Is that an enhancement? So, now, a related question that will arise here is, Instead of spending so many years doing meditation and mental concentration exercises and such, suppose we were to modify the central nervous system of the chess player, or the brilliant performer on the cricket or football field. So, instead of spending several years training, getting up at 4 in the morning, practicing various mental and physical exercises for concentration, for bodybuilding, etc., you do your bodybuilding, but you enhance your mind via a modification of your central nervous system. Is that acceptable?

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Related Transhumanist Question:

Instead of training the mind, meditation, exercises etc., for years, suppose we modify the central nervous system of the chess player, cricket champion, or football legend?

Is that acceptable? Why? Why not?

Both cases: instances of enhancing abilities.

Why is practising mindful techniques not considered enhancement, but chemical, pharmacological, technological modification intervention deemed to be enhancement?

Both have same consequences.

Moral Enhancement and Contemporary Literature: Octavia Butler's Hyperempaths

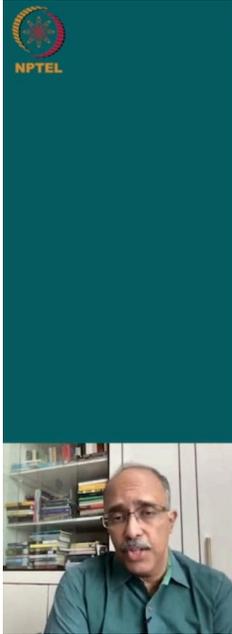
Since, please note this, In both cases, you are enhancing your mental abilities. One, you are following a rigorous regimen of training for concentration, training for resilience, training to bounce back from bad performances on the field, being tougher on the field, etc. So, in the place of that, you modify your nervous system. What's the difference?

Why is Practicing Dhyana and meditation and yogic practices not deemed to be enhancement techniques, but the pharmacological or technological intervention into your central nervous system deemed to be enhancements. As in, my question to rephrase it, when you practice several years of consciousness cultivation, concentration techniques, That's deemed to be still natural and not enhancement. But if you modify your nervous system through the injection of chemicals or modification to your nerves, that is deemed to be enhancement.

Both have the same consequences. Right? So this is where the problem will come. And as you can see from the quotations on the slide for biomechanics, we are beginning to see the change. We have one more instance of how

The nature of sport has changed. On the cricket field and in several sports that we watch live, the camera and television have together altered the nature of our viewing of sports spectatorship because they take us into the stadium as if we were there, right? So, live telecast means we are there. Now we have instant slow-motion replays, digital navigation and tracking devices, and gigantic screens at the venues. Players wear cameras, which means the nature of the immersive experience for spectators has taken us right to the body of the sportsperson.

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Augmented Reality and Digital Sports – Cyborg Sports

Camera + Television: has altered the nature of our viewing *live* sports – spectatorship has changed – as if we are there *in* the stadium (instant slow-motion replays, digital navigation, tracking devices, even gigantic screens at the venue itself, cameras worn by players – an immersive experience) and even in the body of the sportsperson.

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Right there. You know that several sportspersons wear cameras. It's part of their job. So when we are playing, we are also recording. And we have the sportsperson's record of things.

Think of how the nature of spectators has changed so drastically. Amazingly so. Now, if we turn toward augmented reality and digital sports, a whole new cyborg sporting experience exists. Sport has been cyborg for some time now. But we have a problem with doping and gene doping.

Because there is a binary created between the natural or naturally gifted sportsperson and the duped or a modified sportsperson. We deem the duped or modified sportsperson as not quite nice, as sometimes even human, as a natural sportsperson because we believe that the modified enhanced sportsperson has gained an unfair advantage over the quote-unquote naturally gifted sportsperson. Now this is where our plot actually thickens.

If you think of enhanced sporting bodies versus general human enhancements, we go back to the early question. Is our body a limitation to be overcome? The question of enhancing sporting bodies cannot be segregated from larger questions of human enhancement. We cannot say that the problem is only with sporting bodies being enhanced. We have to locate the enhancement of sporting bodies in a context in which all kinds of human enhancements occur now, and are available now.

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Is there are a body limitation to be overcome?

Question of Sporting Bodies cannot be segregated from the larger question of Human Enhancement that also is a question of Cost and Class.

Researcher: allowed to genetically modify ourselves for the sake of research quality?

Augment or modify Intellectual ability: acceptable?

Musician: Genetically modify future generations; not permissible; why not?

Gene modification: acceptable or not?

-- Andy Miah

Education is a modification; diets, medical care, training facilities, are all ways of modifying with a specific goal in mind.

Talent is nurtured; it enhances a potential into a supreme quality performance.

What is 'natural', then?

Moral Enhancement and Contemporary Literature: Octavia Butler's *Hyperempaths*

Accounting for the fact that these might be expensive, that means there is a class divide as to who can afford it and who cannot. It might create one fresh hierarchy of augmented humans versus un-augmented humans. So we keep that in mind. Now the question is, would it be acceptable if an academic or a researcher opts for enhancement through pharmacological or genetic means? to become a better researcher.

So suppose I want to enhance the quality of my research, the quality of my writing. Am I allowed to genetically or somatically modify myself by which I mean bodily but also mentally my intellectual abilities? Am I permitted to do that so that the quality of my research goes up, so that the quality of my publications goes up? Is that acceptable? Can a musician aim to modify himself or herself to produce better music?

Then, of course, should we undertake genetic modifications so that future generations in my family will also be more advanced? So should a mathematician modify his or her genes or genetic material so that his or her progeny will also be brilliant scientists, mathematicians, and Einsteins? Or should we say that's not possible? If we say that these are not permissible, then the question is: why not? Let's also ask a more basic question.

Is the skill that you see in Usain Bolt, Roger Federer, Messi, or Ronaldo remotely human? The way they play, the way they run does it look human to you? Now, are they enhanced? You say, 'No, no, they're natural because they don't use any prosthetics, prosthetic materials, pharmacological aids, or otherwise.' But they train.

They train for years. They train for decades and they train every day of their lives. Right? They practice mental and physical endurance measures, concentration measures. They're not enhanced, are they?

How can you say that? So, if these people came for 15 years to become superstars, high performance athletes and sports people, why should a musician not do that? Why should an academic like me not seek enhancement of my abilities? And why is it not acceptable

then? As people like Andy Mayer have noted, gene groping raises the question to another level.

We ask, is bodily modification less dangerous or more dangerous than genetic modification? Is any form of gene modification for enhancing ethically acceptable or not? Now, education is also a form of enhancement, isn't it? It enables you to develop more skills. From childhood you learn to use numbers, to use alphabets, to use various devices.

This current generation of school-going children learns to use the iPad, the phone, and various digital resources at a very early age. Is education... Not a method or a technology of enhancement. It is. It's most certainly so.

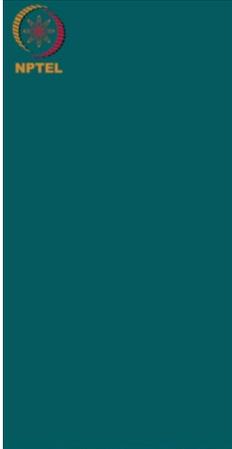
So, think of diets, medical care, and training facilities that produce high-performance athletes. Right? The kind of training centers and you know when you read about sportspeople from the Global South complaining that their training facilities are not good enough for them to compete at, say, the Olympic level. What are they saying? They are saying that they do not have the dietary, the physical infrastructure around them, the devices from clothing to running surfaces on par with that of the first world.

Right? Then the first-world athlete has a superior diet, excellent medical care, and brilliant training facilities. Do we think of sports as a level playing field? It most certainly is not a level playing field, is it? That people with better training facilities are actually performing better because of those training facilities, not because they are naturally brilliant athletes.

I am not denying the fact that they have talent, but the talent is nurtured in a setting that enhances that talent into supreme quality performance, which people with the same amount of talent from the global south may not have. This means if two people have the same brilliant skills in football or cricket, the person with better training facilities, a better diet, and medical care will perform better than the person who doesn't. So when we say 'natural athlete' and it should be a level, democratic, and fair system, sports is not so. We do understand that. Which also means that

we do not really have a consensus on what 'natural' is. What we understand by the term 'natural.' Bodies are shaped, trained, fed, and medically cared for in terms of gait, posture, eating habits, manners, and skills through cultural training. Right? All of us have been modified from the moment of our birth and mostly even before that.

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Various transhumanist questions boil down to this:

If we acknowledge the social value of enhancement – say, empathy – then why should sports remain pure and ‘natural’?
-- Alan Buchanan

Is there a consensus on what ‘natural’ is?

Which cultural traits do we value over others?
If we may produce more compassionate beings, why not better musicians?

Moral Enhancement and Contemporary Literature: Octavia Butler's Hyperempaths

So, we have no such thing as a natural body. They are all being modified. Then why do we expect sporting bodies to be natural? What we need urgently is a review of what we understand as social enhancement.

The social value of enhancement. Enhancement is, after all, a model of development. If the all-round development of the human and the collective can be achieved by genetic modification, why not? As in, if by enhancing bodies for generations to come, we can transform society itself into something else, into a better class of people, into a better world, what's wrong with that? And I recommend that you take a close look at Francesca Ferrando's lessons on moral enhancement for this particular purpose.

Commentators like Alan Buchanan argue that if human excellence and productivity can be enhanced, then perhaps it should be a government enterprise. If the enhancement of certain skills is much desired, then why not sporting skills? If you can improve compassion, mathematical reasoning, appreciation of music, and empathy, why not enhance sporting skills? Would it make us less human? Why do we assume that humans should remain pure when other forms of enhancement might be more acceptable?

The point is also: which values do we want enhanced? Which qualities are more culturally acceptable or valued? So if we believe that humans can be enhanced for better compassion, altruism, or mathematical abilities, then why would we object to faster and better athletes? So, as you can see, this is a very difficult debate.

If education is a form of enhancement, then why not replace it with injections or genetic modifications? Education is also a form of enhancement. If education is a form of enhancement that is acceptable, why not enhancement in sports? If you believe that you can enhance musicians to produce better music, novelists to produce better novels, and academics to produce better research, then why should we not produce athletes who can

deliver better performances? The question, as I said a few minutes ago, is which cultural traits do we value?

Which cultural features do we prefer? So, altruism and compassion. Moral enhancement debates align with that if you can produce more compassionate human beings, that's acceptable. Well, if we can produce more compassionate human beings, what prevents us from producing more musically inclined people, better musicians, and, of course, better athletes? That is the question.

Thank you.