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# **Bicycle cinema: Machine identity and the Moving Image**

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## **Abstract:**

This paper examines the relationship between identities and the bicycle as portrayed in the films. The analysis finds that taking the viewpoint of the bicycle emancipates the bicycle from being subjected to closure, as the constructionists would have it, and thus articulates the differences with which the bicycle can communicate to its rider. The paper examines the bicycle as depicted in three films: *Premium Rush* (Davis Koepp, 2012), *A Sunday in Hell* (Jørgen Leth, 1977) and *Life on Earth* (Abderrahmane Sissako, 1998). It engages with the concept of 'interpretative flexibility' and the development of the bicycle, as examined by Wiebe Bijker and others, and argues that the interpretative flexibility of bicycles does not cease just because the high-wheeler was abandoned and the "safety" bicycle was universally accepted. The fight for the role of the bicycle continues and the bicycle is subject to constant transformations in order to reconstruct it according to human needs. Andrew Feenberg's modified constructivism is applied to re-examine the technical development of the bicycle, claiming that technology is dependent on specific social structures as well as human agency. The paper argues that just as social structures are negotiable and unfixed at any point in time, the bicycle too is never neutral but remains negotiable and unfixed. Consequently, since the bicycle constantly 'speaks' back to the user, there is never closure in the technical development of the bicycle. Drawing on the writings of Bruno Latour and the Deleuzian idea of assemblages, the bicycle and its rider are considered as an organic entity that is constantly forged and un-forged. Understanding the rhetoric of the bicycle machine helps the convergence of a bicycle becoming with becoming a rider, marking the bicycle as equal to its rider. Viewed in this way, the hierarchy of agency collapses and a crystallisation emerges out of the rider and bicycle entwinement.

Keywords: Bicycle, cinema, technology, assemblage, meaning, identity

## **Introduction**

Modern history has experienced a few bicycle-waves. During each of these waves, the bicycle has acquired different political agencies as a popular vehicle of transport: from the 'boneshaker' to the high-wheeler, from the safety bike to the working class vehicle and from a 'thing' of situationists to the preferred vehicle of the green movement. Each time the bicycle has been taken up by different social classes to 'mean' something to their riders and to the society in which they travel, but each time meaning is ascribed to the bicycle it has political consequences. The main aim of this essay is to examine this 'meaning' of the bicycle, not through a historical perspective, as might appear obvious, but through how rider and bicycle

have constructed their relationship as portrayed in cinema.

By meaning is meant a process where two subjects (or a subject and an object) enter a communication system wherein both reach some sense of understanding. The noun 'meaning' suggests significance to an interchange between humans or between human and object, and through meaning an important or worthwhile quality is found in the relationship, e.g. it has purpose, or it makes sense. However, while meaning in human relationships can be grounded in a consensus regarding meaning and what is meaningful, when one part of the interchange is a nonspeaking object the relationship rests on feedback systems that are only detectable to humans. In subject-object relationships consensus arrives through giving meaning to our human actions and the history of the bicycle shows that different meanings are given to the bicycle. However, subject-object relationship also holds the danger of determinism, i.e. technical artefacts (object) shape humans (subject). Here agency is a property of the artefact and humans are subjected to its predetermined, instrumental meaning. On the other hand, when technological artefacts are reduced to instruments, humans are empowered with agency and control to colonize nature. Subject and object seem to be the wrong terms to describe a relationship between rider and bicycle, since they arbitrarily prioritise one role over the other – the rider over the bicycle or vice versa. The aim is to see these two agents as equal. As two entities becoming one.

If human identity is made up of multiple parts, so is the identity of the bicycle. Following Antoine Hennion (2007: 100-1), the bicycle is not just social construction; "it is a reservoir of differences that can be brought into being". The bicycle makes the rider just as the rider makes the bicycle. The main contention of this essay is that although the bicycle does not have a verbal language, it can still communicate to us in order to forge a meaningful relationship with humans. This is where the essay will depart from the literature on the bicycle and its development (Bijker 1997; Herlihy 2004; Wilson 2004), its energy transfer (Illich 1974: 61-4), as well as with the more recent sociological (Horton, Cox and Rosen 2010), phenomenological (Strehovec 2010) and anthropological studies (Furness 2010). These studies of the bicycle are not excluded as invalid or incorrect, but I argue that in order to throw new light on the pedal machine and its human users, we need to unlock a system of interchange that is much more than human communication. The aim is to move the discussion closer to theory of aesthetics where meaningful relations are formed in the course of the encounter with an artifact. In other words, the primary objective is not to understand what human agents learn from the bicycle but how they take the perspective of the bicycle. What does it mean to become bicycle? Are bicycles becoming bicycles in the same way that we are becoming woman or Dane? The aim of the approach is to unscrew fixed points of things in order to emancipate humans from identity. If things can become a reservoir of possibilities so can humans.

Usually, human identities are studied in relation to the bicycle, only rarely are we interested in the identity of the bicycle and what role this plays in shaping meaning. As Ben Fincham (2006: 208-22; 2007: 179-95) has shown in his studies on bicycle

culture among messengers, riding bicycles in modern Western cities is about identity as much as about transportation from A to B. Riders speak through their bicycles and in the ways that they ride their bicycles, thus communicating their identities to the surrounding environment. In Chris Carlson's edited collection on the Critical Mass movement, the identities of riders are also in focus (Carlson 2002), without giving much consideration to the bicycles themselves. This has also been my approach when writing about the bicycle and cinema previously (Kristensen 2013 and 2015). In short, there are lots of studies on the effect of the bicycle machine on its human users, which mirrors the situation in cinema studies where questions of "identity and micro-politics" have taken the forefront (Mazierska and Kristensen 2014: 7). As a result both cinema studies and studies of bicycle culture omit attention to the technology on which they rest and they neglect an important dimension of how meaning and ideology are produced from engagement with this technology.

The principal claim that the essay makes is that we need to consider the identity of the bicycle as seriously as the identity of the rider in order to understand how the relationship becomes meaningful. Feenberg's humanist technical politics fits the argument that technology is shaped by politics. In order to arrive at this claim, a brief history of the bicycle will be sketched out. Before bringing forth cinematic examples of bicycle/rider relationships, the essay will make reference to assemblage theory as a possible way out of bicycle determinism and a way forward in seeing bicycle and rider as part, or extension, of each other.

### **Becoming Bicycle: The STS perspective**

During latter half of the 19<sup>th</sup> century, the bicycle had different *meanings* for different social groups (Bijker 1997: 19-100). The key element separating these social groups was the high-wheeler, or the Ordinary (Bijker, Hughes, Pinch 1989: 30-39). The high-wheeler was a working *Macho* machine for young upper-class men, who "could display their athletic skills and daring by showing off in the London parks", while for other social groups, such as women and elders, the same machine was unusable, being "difficult to mount, risky to ride, and not easy to dismount" (Bijker 1997: 74). The high-wheeler was not for everybody as it literally excluded certain social groups and potential users; it was difficult, even dangerous to ride. The high-wheeler had different meanings for different social groups; meanings that these groups *gave* the high-wheeler. "In deciding which problems are relevant, the social groups concerned with the artefact and the meanings that those groups give to the artefact play a crucial role" (Bijker, Hughes, Pinch 1989: 30). In other words the different meanings given to the bicycle are presented as a problem that needs to be resolved by human actors.

The dominance of the high-wheeler was broken with the development of the Rover safety bicycle. A low-mount, chain driven bicycle became popular especially with female riders. According to constructionism, this was the design that 'won' out and

that today largely defines the bicycle. Two equal sized wheels mounted on a diamond frame, on which a saddle and a handlebar are fixed. The way in which the meaning of the bicycle was contested by different social groups has often been highlighted as key in its development. According to Wiebe E. Bijker, the development of the bicycle illustrates 'interpretative flexibility', where two or more interest groups use similar technologies but the object-machines have yet to settle into a final design. The interpretative flexibility appears before technology gets fixed into a product that users agree upon. In this view, the bicycle has a final design and a fixed meaning only when its interpretative flexibility has ended. For the 'ordinary' bicycle to become 'the forebear of future designs' the safety aspects won out over speed-models and the user perspective, not efficiency, was key in facilitating this transformation (Feenberg, 1995: 7; Feenberg 1999: 88).

The development of the bicycle becomes an illustrative example – one that many can easily relate to – of how the meaning of a technology becomes fixed and stable in the mind of the user. Andrew Feenberg's modified constructionism involves the politicization of this closure. Norms are established and formed from struggles over the use of technological designs and often these struggles have political connotations. In the struggle over the bicycle, it was women's emancipation that gave the fight over design a political edge. Closure of a technical design codifies technology as 'neutral' and 'natural', since it discards other designs creating a singular hegemony of technology (Feenberg 1991: 35). The operation of hegemony supports unquestioned power structures, which for Feenberg can be deconstructed. We cannot imagine the bicycle otherwise, because its design has been settled, become reified and concrete, but through its deconstruction we can choose wisely in the future. We can historically uncover the political struggle, but not change it. The purpose of recovering the history of the social shaping of the bicycle is that the interpretative flexibility of the bicycle around the turn of the century allows us to perceive other technologies with a more proactive and reforming intent – the idea that we can influence the development of technology by contesting the meaning of these machine devices.

Feenberg argues "that modern forms of hegemony are based on a specific type of technical mediation of a variety of social activities, whether it be production or medicine, education or military, and that, democratization requires radical technical as well as political change" (Feenberg 2010: 6). Neither Soviet communism nor capitalist industries managed to democratize technology, which leads Feenberg to assert that a truly free society depends on broadening the range of persons authorised to make decisions on design and use of technology. Industrial production is as undemocratic as it were during Marx's time; nothing has changed with regard to determination of technology. Feenberg seeks to open up the process of technological developments to social forces that have political interests in technology. Technology needs to be disputed and fought over in order to open up closures imposed on technologies by their (our) industrial masters. Since technology is not exclusively based on technically rational thoughts and decisions, but comes into being through interaction with social forces. Technology is not

forming us, but we are forming technology. The space between constructionism and determinism is, according to Feenberg, the field of technical politics and the aim of progressive interventions in this field is to establish human control over the meanings of technology designs.

Viewing technology in this way as underdetermined, opens up our understanding of technology design, exposing the role of a singular rationality of control and the capitalist pursuit of profit. At the same time it highlights the possibility of countering these forces. Critical theory of technology “derives from the thesis of underdetermination [...], which refers to the inevitable lack of logically compelling reasons for preferring one competing scientific theory to another” (Feenberg 1999: 76). Technology is political because the development of technology is not unilinear. There is not one logically compelling reason why this or the other design comes into being. It is up to us, the users, to choose from the available competing artefacts and thus exercise our democratic responsibility to choose what is right for us. This is what has happened with ecology and the choice of green energy production over fossil fuelled energy and this is what happened to the bicycle in its phase of ‘interpretative flexibility’, where safety became the preferred feature of the bicycle and the high-wheeler design lost out. Feenberg’s interpretation of technology gives the user agency in the form of control over which construction survives and which one is relegated to history.

### **Meaning and Becoming Bicycle**

As a manifestation of technological hegemony, meanings of objects, such as the bicycle and other forms of technology, are either settled and thus will feel natural or take on a more forced character, which will indicate that an intervention is taking place through the implementation of an object and that meaning has not really settled regarding the object at hand. For a constructionist theorist there are two distinct periods in the analysis of an artefact, one where there are contrasting possibilities and another where the design settles into one over the others. These periods have historical linearity, since first there is conflict over different meanings and then there is one preferred meaning that determines the artefact. As a social construction, objects are made by biological humans and can thus be situated with a history of that particular object. However, this leaves the artefact without agency – objects are formed and constructed by humans for their use and objects are not actors in their own right. In this process, the bicycle is not asked what it would like to be or how it would like to be used. In the constructionist approach the bicycle has no voice of its own, which sounds like an abusive relationship where one part is silenced, leading to lack of power. The central claim of this paper is that the bicycle is still a multitude of possibilities, even after its so-called interpretative flexibility.

Constructionists and humanists argue that technology is unnatural before becoming natural. Technology intervenes into nature, furthering human progress, but this assumes that technology is unnatural. Instrumental objectives of humans are held to

form unnatural technical artefacts, which human beings then naturalise by using them. In terms of the bicycle, it is an unnatural technology that humans need to naturalise through a dispute over meaning. Is it an athletic speed machine or a handy leisure tool? This dispute implies a period of stability before the technical intervention happens and that once the intervention is made it has to be subdued to restore normality. However, if we consider the normality of the bicycle an illusion, then there is nothing unnatural about the bicycle.<sup>1</sup> In this sense the bicycle is part of an endless difference that is always 'out there' for us to naturalise and use.

Feenberg's modified constructionism shows that motives, values and beliefs of human agents shape the technology we use. This creates a space for critical theory, a space that is formed by politics and ideology. Radical transformation of technology is possible through choosing meaning that is not always dependent on efficiency and productivity. In relation to the bicycle, this modified constructionism can be taken a step further by infusing the artefact with agency, allowing for a more reciprocal politics of objects by listening to the object in use. The struggle over the design of the bicycle by interest groups is an example of releasing its other potential meanings. However, we need to question the constructivist's closure and fixity of technology. The interpretative flexibility of bicycle does not cease to be contested just because the high-wheeler was abandoned and the "safety" bicycle universally accepted. I will claim that the fight for and over the role of the bicycle continues and the bicycle is constantly subject to transformations in order to reconstruct it according to different human needs. Furthermore, the bicycle participates in this transformation. When someone takes an interest in a bicycle they are 'taken' by it – it gets a hold of them and the emergence of a 'natural' meaning is not something that happens as a consequence of human speech on its own. Modern bicycles may not look like the high-wheeler, but some bicycles still speak the same, or similar, language of exclusivity that the high-wheeler did.

### **An Endless Becoming Bicycle**

The fact that the bicycle has not settled into a final design can be illustrated by a recent celebration of the ten most beautiful bicycle designs hosted on the auto section of the BBC website.<sup>2</sup> As is typical of bicycle magazines that celebrate bikes as objects of desire, it is unusual, aesthetic appearances in the objects that get singled out. In this it is not dissimilar to magazine representations of architecture or sports cars, where concept design and stylishness are celebrated. The BBC's celebration of the ten most beautiful bicycle design is by far unrepresentative of the millions of bicycles being made the world over, but it nonetheless indicates how bicycle designers are projecting their ideas and thoughts about how the bicycle should look and behave. Of the designs selected, one was a uni-cycle (a 'halfbike'), three were tri-cycles and yet another was a quart-cycle sponsored by a large famous courier company.

Evidently, the design of the bicycle has not been settled as the bicycle gets re-designed continuously and endlessly.<sup>3</sup> One way of reading the BBC's celebration is to argue that the design of the bicycle is far from final. Therefore, we can begin to question the conclusions reached by constructionist studies regarding the bicycle and its interpretative flexibility. One way of arguing against it would be to question the principle that development of technology has a beginning, a middle and an end. Beginnings have always been difficult, even for bicycles, and bicycle beginnings have a precarious relationship with eurocentrism (Boal 2002). According to constructivism the beginning-middle-end narrative is needed by the analyst to remove the object of study from the analysis, disentangling the human observer of history from the process of data gathering. She needs to clear the desk, so to speak, of failed designs, in order to detect the social construction of the bicycle (Bijker 1997: 84). The social constructionist produces a stabilising object slowing down the process of change with the purpose of bringing closure to the narrative. Just as a Hollywood narrative has an initial disturbance of equilibrium that gets re-established in the end of the film and the viewer can walk out of the cinema with a peace of mind that all is in order (at least until a sequel arrives and the equilibrium is disturbed once again), so in a similar fashion, in order to give history to the object, the constructivist closes the transformation of the object when it is at a standstill and a struggle can be turned into a denouement. Without this narrative standstill, the history of the bicycle would slip away into an endlessly becoming bicycle, where it is impossible to compare one singularity to the other, because there will be a constant flow of becoming bicycles. The standstill is fictional since as soon as we take our eyes off the object it evolves; it evolves into new conflicts and struggles that have to be resolved.

In order to get beyond this narrative structure, I will argue that previous designs are not discarded as such, but that all bicycles have previous designs incorporated into their identity. It is part of the baggage that is latently available through engaging with the bicycle. In short, the high-wheeler, tri-cycle and even the wheel-barrow (Boal 2002) are still part of the bicycle that we engage with today, because these 'misdesigns' will remain part of the bicycle as every bicycle constructor will need to make a decision of which framework to build her bicycle, what meaning should it hold. Following Gilbert Simondon, misdesign can be viewed as pre-individual in the concretisation process of objects; "the object always retains the vestiges of its abstract and artificial origins" (Chabot 2003: 17). Every bicycle design can be replaced and reworked using concepts that are part of the abstract or artificial bicycle. Initially made in England, the Dursley Pedersen design is a good example of this, with its distinctive hammock-seat. The industrial production of the bicycle ended sometime before WWII, but it was later reproduced in 1970s in the free-city of Christiania, Copenhagen, where the meaning of the Dursley Pedersen design changed, according to the new manufacturer.<sup>4</sup> The Pedersen bicycle was a hippie's bicycle that stood out in a grey mass of bicycles running in the streets of Copenhagen. The hippy-identity fitted the hammock theme of exotic laid-backness as well as the country of origin of the initial designer. Although not a completely transparent signifier of athleticism, as was the high-wheeler, the Pedersen bicycle –

as a feature of the Copenhagen cityscape – brought back the dandy-like characteristics that were sedimented in the bicycle, latent in it like a memory, since the draisine and the boneshaker.

In standard constructionist account of the development of the bicycle, the Pedersen design had been discarded and rejected by manufacturers of the bicycle after people found it difficult to produce and to ride. The Pedersen bicycle refers back to a period after interpretative flexibility, when the design of the bicycle had settled, but it is obvious that interest groups still contested the aesthetics of bicycle. The Dursley Pedersen bicycle had another look and feel to what it meant to ride a bicycle. The point is that the development of the bicycle never ended as the constructionist paradigm would like to project. Looking at the bicycle as object of analysis, we must face the fact that the bicycle is in transformation, even as we are observing it in much the same way as the moving images that I will refer to later. The development of the bicycle has never ceased to transform and the design of the bicycle is constantly being contested by different interest groups.

### **Becoming Bicycle as Assemblage**

The notion of assemblage is drawn from Deleuze's and Guattari's thinking, in which wholes can be 'constructed from heterogeneous parts [...] ranging from atom and molecules to biological organisms, species and ecosystems' (De Landa 2006: 3). When viewing the rider and bicycle as components, or parts, of an assemblage, rider and bicycle can be detached from each other without losing their individual identity, because it is only as apparatus wholes that they acquire their identity. Preserving the identity of the human-driven machine of velocity, the bicycle can be plugged and unplugged to different assemblages and thus communicate different meanings through multiple selves. Just as human identity is not fixed, so the identity of the bicycle fluctuates between different assemblages and meanings; and just as humans do, the bicycle speaks through identity about the whole. Accordingly, we can argue that seeing bicycle and rider as an assemblage rescues the bicycle from anthropocentric linearity, where a beginning, a middle and an end are projected as fixed entities. In fact, we do not need to detect links that begin or end, but wholes that offer meaning.

This observation leads me to Bruno Latour (1992) and the ethics of things (Verbeek 2011). Latour sees the evolution of individuals as endless and open-ended, in much the same way as I have been suggesting applies to bicycles. The key question for Latour is how does technology stop changing and how does it even begin to assemble? Understanding humans and non-humans, we need to see them as part of the same cosmos and "our reality is a web of relations between humans and non-human entities that form ever-new realities on the basis of ever-new connections" (Verbeek 2011: 29). In Latour's development of technology, mechanisms are 'prescribed', i.e. they are internal to the technology itself. This model can be described as the communication model (Nardi and O'Day 1999) or the translation

model (Wajcman 2004: 45), where the thing itself has a 'being', an existence, which make us behave according to it. Latour's famous example is the door that 'delegates' actions to its human users. Similarly we could argue that the bicycle has mechanisms that are prescribed for the user such as energy transfer and velocity. I would claim that if we are to understand the bicycle, we would need to perceive the bicycle as an entity that delegates actions to the users, but that also has an identity that needs to be co-opted by the rider. The point is to understand social assemblages as reaching beyond human-to-human relations, but that we need to broaden the focus and look at how humans and things come together. To do that Latour argues, requires a terminology that encompasses human and technology as equal.

[Sociologists] are constantly looking, somewhat desperately, for social links sturdy enough to tie all of us together or for moral laws that would be inflexible enough to make us behave properly. When adding up social ties, all does not balance [...] we simply have to turn our exclusive attention away from humans and look also at nonhumans' (Latour 1992: 227).

This is why I would argue that the bicycle has an identity, which can be projected in similar ways as those involved when humans become individuals. In order to understand how social assemblages involving technology are formed the bicycle has to be viewed as an equal partner, in the same constellation as in Alan Badiou's love relation where two entities becomes one, but crucially have to be based on equality (Badiou 2009 [2012]: 29). Human and non-human equality leads us more towards the concept of the anthropocene, which "usher us away from the notion of modernisation" (Latour 2015: 146) and away from the construction of beginning-middle-end development of technology.

However, the question remains how we turn our attention toward nonhumans without 'telling' them how to be meaningful. In Nardi's and O'Day's interpretation of Latour's account of the active role of technology in meaningful situations, they point out that technology can move from one human group to another and still contain the prescribed use, without being used as prescribed: 'As it moves from one group of people to another, it carries its own message and meaning along with it – its prescriptions' (Nardi and O'Day 1999: 31-2). The meaning and message of the bicycle is carried over into the next human group. On the one hand, we are still within the communication model of engineer-user dynamics as there is a message, which has meaning, but, on the other hand, there is more than one prescription, which means that the bicycle can be more than just one thing, more than just one final design. This opens up the field for multitude of the bicycle and more than one kind of agency for the bicycle itself. But where should these meanings come from if not from the humans that use it?

Following Latour's account, I would argue that just to perceive what is 'prescribed' in the bicycle by the founding designers will not help us 'listen' to the bicycle. This is not about how it speaks to its user and how we speak back at it. As mentioned

above, every misdesign as well as the safety design is available through the bicycle and these are part of the making of a bicycle, thus part of being a bicycle. Commanding, or 'telling', the bicycle that it is a safe and easy to ride or a transportation vehicle, reduces the potential of becoming bicycle. Just as its human equivalent, its identity is much more usable than that. In the end we are rather short of interpretative models for perceiving the becoming of bicycles from their perspective. However, the point is not only to emancipate the bicycle and its rider but look at them as an organic whole.

The assemblage concept reveals its true potentials within what Latour views as the active role for objects. Drawing on assemblage theories in a sense unifies Latour with Deleuze, a linkage Latour himself has made (Schmidgen 2012), but it also brings Simondon into the discussion, since he spoke about the mode of existence of things, which suggests that each thing "is more than just *any thing*" (Chabot 2003: 3-4). Within this model there are not a beginning, a middle and an end, but only ever-new beginnings that have ever-new ends. There is no dramaturgical middle to transport us in-between start and finish.

### **Becoming Bicycle: Three bicycle entities/identities in Films**

This section will examine human-bicycle interaction, seen as assemblage wholes, as portrayed in the three films: *Premium Rush* (Davis Koepp, 2012), *En forårsdag i helvede/A Sunday in Hell* (Jørgen Leth, 1977) and *La vie sur terre/Life on Earth* (Abderrahmane Sissako, 1998). The examples are chosen to illustrate differences rather than similarity. The hope is that these bicycles show how differently they behave and how differently they can delegate action to their riders. I will first provide a short synopsis of the films and hints about their production contexts before examining how the bicycles 'speak' to their riders.

*Premium Rush* is a US produced film with emerging stars as well as an emulated formula of an action thriller. In the film, Wilee a bicycle courier is delivering a letter containing a ticket. The ticket can secure the entry into the US for a young child and her grandmother and it has been bought by the child's mother. The mother is betting on Wilee, the bicycle courier, steering free from a corrupt cop, who also wants the ticket to repay a gambling debt, and on general traffic conditions, to deliver the ticket on the other side of town on time. The narrative is constructed around the obstacles that Wilee has to encounter and overcome in order to reach a final destination and thus bring resolution to the conflict of the film. There are two reasons for choosing Wilee's bicycle for analysis. The first feature is, of course, the bicycle that Wilee is racing on and the second is the way the filmmakers have chosen to illustrate the choices that Wilee makes while on the bicycle: at key points the viewer gets an illustration of several possible paths for Wilee to avoid collisions.

The second example is from *A Sunday in Hell* – Jørgen Leth's classic film from 1977, which documents the 1976 Paris-Roubaix race. It is a documentary rather than a

fiction film, but it is not the genre of the film or its style or form that give the bicycle specific meaning. The film opens with a mechanic cleaning and preparing a bicycle, before the riders arrive at their hotels and accommodations. This focus on the race surrounding rather than the race narrative of winners and losers is similar to Lindsay Anderson's *Every Day Expect Christmas* (1957). Just as Anderson did in his documentary on the Covent Garden Market, Leth aims at telling the meta-story of a race. His filmmaking is combined with his own narrating voiceover, which leaves a commentary on the images, a style that Leth also used in his previous bicycle films.<sup>5</sup> The film is celebrated by bicycle fans all over the world, has travelled to festivals and continues to be screened at specific events that either celebrate the documentary genre or the bicycle film. To illustrate the scope of the production of the film, Leth had 23 cameramen working for him during the race plus material from television broadcasts at his disposal. The result is a film that captures the race in minute detail as well as telling the race story in epic proportions. In this film, I concentrate the analysis on the bicycle of Eddy Merckx.

The last example of cinematic bicycles is from *Life on Earth* (1998) by Abderrahmane Sissako. Written and directed by Sissako, he also stars in the leading role as an intellectual, Dramane, returning to his hometown of Soloko in Mali. Made just before the turn of the century when concerns were high regarding the total loss of communication as a consequence of the millennium bug, Sissako tells a story about inter-human communication and about how people meet – all taking place in the small village of Sokolo. Unique for this film is that it has no cars - only an image of a car, as a desirable and fetishized object, features in the film. Instead, all transportation happens on bicycles. Indeed the film's central encounter between Dramane and Nana, a local girl, happens while the two are cycling. Another focus of the film is on communication from the local postal office where people can make long distance calls, but it is not always easy to get a connection through the airwaves. Connections, as the postmaster says, depend on luck. The film is littered with images of bicycles and their riders. Both Nana and Dramane are seen passing by the camera against a scenery of field, rives and village life. Their pace is always moderate, their riding position is up-right and their effort minimal. No headwinds or hills to conquer, neither any rain to interfere with the riding. Their bicycles are minimally equipped; no gears or protections against chain or wheels. The saddles are wide and comfortable, and in one scene, Nana has decorated her handlebar with a cloth matching her saddle. So what are these three different bicycles saying?

If we begin with Wilee's bicycle, then its fix wheel drive gives it an edge that Wilee prefers. 'Breaks get you killed', Wilee tells his girlfriend, who is also a bicycle courier. Wilee argues that they give you a false sense of security. It is better to rely on your bicycling skills instead of brakes that are unlikely to save you from crashing with a car anyway. The skill set that Wilee depends on is thus outside the properties of the bicycle in itself but resides in ability to read the traffic, speed of reaction and being able to manoeuvre the bicycle. However, the bicycle will have to be able to react from Wilee's quick manoeuvre, as his brain works out ways to avoid collision with pedestrians, prams or cars and trucks. Thus the feedback that comes from

Wilee's bicycle is similar to the high-wheeler which exposed concerns over the safety issue. Falling off the bicycle was dangerous and breaking at speed was nearly impossible due to the fixed wheeled speed. Another feature of Wilee's bicycle that recalls the high-wheeler is the narrow handlebar, which no doubt gets Wilee greater space for manoeuvring through the busy traffic, but which is also characteristic of the high-wheeler, which had the handlebar close to the crutch of the rider.

Furthermore, the cinematic illustrations of Wilee's choice making, with three possible escape routes for avoiding a crash, are shot from a little above ground. No doubt this is because they wanted to match or emulate the height of the bicycle, but the filmmakers also increase the height in order for the audiences to perceive visually what Wilee 'sees' intuitively. The spectator must look from slightly above to see what Wilee perceives from his bicycle. The consequence of this is that it increases the dislocation that riding a bicycle gives or at least underlines that the viewer is perceiving an enhanced reality. As Jean-Luc Baudry writes, 'to seize movement is to become movement, to follow a trajectory is to become trajectory, to choose a direction is to have the possibility of choosing one, to determine a meaning is to give oneself a meaning' (Baudry 1970 [1986]: 291-2). This is the disposition of the cinematic apparatus (Rosen 1986). Janez Strehovec investigates the similarity of bicycle riding and engaging with 3D, arguing that these two activities take the same imaginary position.

I cycle, and at the same time, by virtue of my perspective modified with the optics of a satellite camera, *I am - above*. Cycling (say, around building sites, amid ruins, or past the site of fires) I look down as if from a spacecraft slowly cruising over an unknown planet, stopping-clicking each time I push on the pedal, to catch a close-up image of some striking configuration on the planet's surface, say, a crater (Strehovec 2010: 6-7, my emphasis).

The fact that Strehovec is *above* while riding illustrates the disposition cycling has and its similarity to that of watching a movie, as in Jean-Luc Baudry's account of the cinematic apparatus (Baudry 1986). While Wilee's decision-making is not illustrated as a spacecraft hovering above, as is Strehovec's, it nonetheless points to the dislocation that the bicycle effects on its riders. Wilee's bicycle makes him (us) 'see' differently. It makes him see more. It is in this more that ideology is hiding, because to it value can be added. Thus the cinematic apparatus, as well as the bicycle, can produce surplus value that owner of the machines can turn into capital profit.

In Leth's film, Eddy Merckx, the most famous of riders of his time, is in focus together with his main rivals. He has a near manic relationship to his bicycle and in particular to the height of the saddle and handlebar. Merckx is with the mechanics when his bicycle is prepared, measuring and controlling that the individual parts of the bicycle are in the correct places. Merckx's control and focus are fixated on the saddle and the handlebar, points where rider and bicycle meet. Although all the bicycles in the film look similar in design, they are in fact individually modified, e.g. some teams have special rims on the wheels to avoid punctures on the hazardous

roads in Belgium and northern France. On the way to the start of the race, Merckx is again not happy with measurement of his bicycle; constantly adjusting the height of the handlebar. In Leth's portrayal of Merckx, he is obsessed by getting the bicycle into a shape that fits his body. Even when the race is hindered by a strike, he gets a wrench from a competitive service car and adjusts his saddle again.

Merckx will not win the 1976 Paris-Roubaix, but his relationship with the bicycle is singled out to illustrate the dedication and the determination of a sportsman. To me it is more about controlling the bicycle as much as possible, which will not lead to equality of mind between rider and bicycle. This is underlined in the fact that the race rider seldom relies on one bicycle to carry her through the race, but has several similar bicycles as replacements. These bicycles in *A Sunday in Hell* are ten-gear racing bikes, but each individual rider has chosen his set of cogwheels that determines the resistance and response of the bicycle. The number of cogs on the two front cogwheels and the five cogwheels at the back is individually fitted to suit the bodily performance of the rider. The identity of Merckx's bicycle is of particular interest since it is an object of constant modification. The optimisation of the bicycle points towards its flexible nature, but also its ability to hinder the performance of the race rider. The resistance that the bicycle has needs to be curbed, controlled and taken command of so that a maximum of energy transfer can be ensured. This is the lot of the race rider, but again the formation of the handlebar, the saddle and the pedals are objects of adjustment. The race rider's feet are trapped to the pedals allowing for drawing them upward as well as downward, the saddles are narrow and ridged without much padding, leaving space for the back muscles to work freely and without resistance and the handlebars are bent to add different positions for the rider depending on the terrain, speed and manoeuvrability. These features of the race bicycle indicate a structure where the rider has optimal control over energy transfer, but also a regime of maintenance and development that is beyond the individuality of the bicycle. In racing all bicycles look the same apart from their brand and sponsor names attached to them.

Nana's and Dramane's bicycles in *Life on Earth* are also nearly the same but without brand or sponsors' name attached to them. Regardless of the gender differences of their riders, the two bicycles share a similar design. They have the same frame format and equal size wheels. These bicycles are nearest to the safety bicycle as highlighted by Bijker and Feenberg. However, they nonetheless indicate a different identity than the safety bicycle as they make the encounter between Nana and Dramane possible. They are not leisure tools of the safety bicycle kind but transporters of humans. Their bicycle identities are intertwined with their surroundings as they are formed by the roads they ride. Nana has made modifications to her bicycle, decorating handlebar and saddle, the same elements that were the object of attention from Eddy Merckx. But it is not speed, as with Merckx, or agility, as with Wilee, that determines the performance of Nana's and Dramane's bicycles, rather it is their ability to transport people and goods from one place to another. The baggage carrier above the back wheel on both bicycles indicates this and brings the tri-cycle design into perspective again. The indulgent

saddles also suggest that these bicycles are meant to be driven at leisure speed; they delegate a certain type of riding, a riding and speed that is suitable for meeting people, that establish communication lines and urge human encounters. In some way, the first encounter of Nana and Dramane illustrates this as Dramane catches up with Nana while riding their bicycles. As Dramane swings his bicycle in a circle around Nana, who in turn has stopped and dismounted her bicycle, she laments him for nearly knocking her over. Dramane stops once he has circled Nana and while their bicycles are still facing opposite directions, the two riders begin their small talk. These bicycles are not 'told' how to respond, how to mean; they are in themselves transporters of humans in ways that can be tri-cycles, quart-cycle or uni-cycles. They have all the meanings of communication in their design. The point is that they are each individuals and as such they impart meanings to the condition describe in the film. In *Life on Earth*, the meaning generated by the bicycles does not go against what human agents apply to them. In other words, we argue that the encounter between Nana and Dramane is conditioned by their rides.

## **Conclusion**

In analysing these films' portrayal of human characters and their bicycles, I have pointed out some concerns with approaching the bicycle as a closed object. The major objection has been the dramaturgical narrative of beginning, middle and end, which this idea hinges on. Feenberg's humanism demands a non-human object that can be analysed and observed outwith the human subject, which allows meaning and value to be added, but Latour's organic way of seeing the ontology of thing allows for the rise of meaning and value that originate in the assemblage of human and non-human. Meaning is thus internal to non-human object. I agree with Feenberg that we should seek to democratise technology design, but that part of the opening up of the scene of design should be to invite objects to participate as well. The bicycle is an example of how we can think anti-anthropocentrically, contemplating that we are equals to the bicycle. The different meanings and values of the bicycles examined here are latently possible in all bicycles.

The three examples were drawn from three very different films, each example illustrating the assemblage of rider and bicycle. In Wilee's courier bicycle we found speed and agility, a bicycle that evokes thrill and danger. Speed was also the object of Merckx and his relationship with his bicycle, but rather than trusting the bicycle, Merckx aimed at controlling the bicycle, to make it fit his body. The bicycles of Nana and Dramane were communication vehicles, efficient transporters of human and goods, but also formed by their environment. All these bicycles, when looking at them in assemblage with their rider, speak different meanings, different purposes and values, which suggest a bicycle multitude with a Latourian prescription of mobility through human disposition. The bicycles in the films show that for each of the riders, their modifications of the bicycle suggest a focus on handlebars, pedals and saddles as signifiers for a human-bicycle interface. A viewing disposition while riding was identified that is similar to the cinematic experience where reality is

distorted from one's own reality. Baudry argued that cinema is a transcendental subject due to its ability to capture and screen movement. This uproots not only the moving images but also their spectator. In a similar way, the bicycle has an ability to uproot, which should lead us to identify a specific bicycle apparatus. With reference to cycling, this paper has argued that to ride a bicycle is to become the bicycle as one unity. Common for all three examples are the human-bicycle relationship, which, at best, can be described as a Badiouian 'two-scene' that demand equality. The bicycle is more than an entity, a technology the delegate feedback to the rider. The bicycle has to be perceived as having a mind of its own.

## References

- Baudry, J-L. [1970](1986). 'Ideological Effects of the Basic Cinematographic Apparatus'. In Philip Rosen (ed.). *Narrative, Apparatus, Ideology: A Film Theory Reader*. New York: Columbia University Press.
- Benjamin, W. (1969) *Illuminations* New York: Schocken Books.
- Bijker, W.E. (1997) *Of Bicycles, Bakelites, and Bulbs: Towards a Theory of Sociotechnical Change*. Cambridge, Massachusetts and London: The MIT Press.
- Bijker, W. and P. Hughes. (1989) *The Social Construction of Technical Systems*. Cambridge, Massachusetts: MIT Press.
- Boal, I. A. (2002). "The World of the Bicycle." In Chris Carlson (ed.), *Critical Mass: Bicycling's Defiant Celebration*, 167–74. Edinburgh and Oakland: AK Press.
- Carlsson, C. (2008). *Nowtopia: How Pirate Programmers, Outlaw Bicyclists, and Vacant-lot Gardeners Are Inventing the Future Today!* Edinburgh and New York: AK Press.
- Carlsson, C. (ed.). (2002). *Critical Mass: Bicycling's Defiant Celebration*. Edinburgh and Oakland: AK Press.
- Chabot, P. (2003). *The Philosophy of Simondon: Between Technology and Individuation*. Trans. A. Krefetz with G. Kirkpatrick, New York and London: Bloomsbury.
- De Landa, M. (2006) *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London and New York: Continuum.
- Feenberg, A. (2005) 'Critical Theory of Technology; An Overview', in *Tailoring Biotechnologies* 1(1), Winter, pp. 47-64.
- Feenberg, A. (1999) *Questioning Technology*. London and New York: Routledge.
- Feenberg, A. (1995) 'Subversive Rationalization: Technology, Power, and Democracy', in Andrew Feenberg and Alastair Hannay (eds), *Technology and the Politics of Knowledge*. Bloomington and Indianapolis: Indiana University Press.
- Feenberg, A. (1991) *Critical Theory of Technology* Oxford: Oxford University Press
- Fincham, B. (2006). "Bicycle Messengers and the Road to Freedom." In *Against Automobility*, edited by Steffen Böhm et. al., 208–22. Malden and Oxford: Blackwell Publishing.
- Fincham, B. (2007). "Bicycle Messengers: Image, Identity and Community." In *Cycling and Society*, edited by Dave Horton, Peter Cox and Paul Rosen, 179–95.

- Aldershot and Burlington: Ashgate.
- Furness, Z. (2010). *One Less Car: Bicycling and the Politics of Automobility*. Philadelphia: Temple University Press.
- Hennion, A. (2007). 'Those Things That Hold Us Together: Taste and Sociology'. *Cultural Sociology* 1(1), pp. 97-114.
- Herlihy, D. V. (2004). *Bicycle: The History*. New Haven: Yale University Press.
- Horton, D., P. Cox and P. Rosen (eds). 2010. *Cycling and Society*. Aldershot and Burlington: Ashgate.
- Illich, I. (1974). *Energy and Equity*. New York and London: Harper & Row.
- Author (2015) 'Marxist Resistance at Bicycle Speed: Screening the Critical Mass Movement', in Ewa Mazierska and Lars Kristensen (eds), *Marxism and Film Activism: Screening Alternative Worlds*. London and New York: Berghahn Books, pp. 213-233.
- Author (2013) 'Work in Bicycle Cinema: From Race Rider to City Courier', in Ewa Mazierska (ed.), *Work in Cinema: Labor and the Human Condition*. Basingstoke: Palgrave Macmillan, pp. 249-264.
- Latour, B (2015) 'Telling friends from foes in the time of the Anthropocene', in C. Hamilton, C. Bonneuil and F. Gemenne (eds), *The Anthropocene and the Global Environmental Crisis*, London and New York: Routledge, pp. 145-155.
- Latour, B (1992) 'The Sociology of a Few Mundane Artifacts', in W.E. Bijker and J. Law (eds), *Shapping Technology/Building Society: Studies in Sociotechnical Change*, Cambridge, Massachusetts: The MIT Press, pp. 225-258
- Marzierska, E and L. Kristensen (eds)(2014) *Marx at the Movies: Revisiting History, Theory and Practice*, Basingstoke: Palgrave MacMillan
- Nardi, B. A. and V. L. O'Day (1999) *Information Ecologies: Using Technology with Heart*, Cambridge, Massachusetts: The MIT Press
- Rancière, J. (1991) *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation*, Kirstin Ross (trans.), Standford, CA: Standford University Press.
- Rosen, P. (ed.)(1986). *Narrative, Apparatus, Ideology: A Film Theory Reader*. New York: Columbia University Press.
- Schmidgen, H. (2012). 'The materiality of things?: Bruno Latour, Charles Péguy and the history of science', *History of Human Science* 26(1), pp. 3-28
- Strehovec, J. (2010) 'Cycling as Reading a Cityscape: A Phenomenological Approach to Interface-Sharped Perception', *Indo-Pacific Journal of Phenomenology* 10(2), pp. 1-11.
- Verbeek, P-P. (2011) *Moralizing Technology: Understanding and Designing the Morality of Things*, Chicago and London: University of Chicago Press.
- Wajcman, J. (2004) *Techno Feminism*, Cambridge: Polity Press
- Wilson, David Gordon. (2004). *Bicycling Science*. Cambridge, MA: The MIT Press, 3rd Edition).
- Žižek, S. (2001). *The Fright of Real Tears: Krzysztof Kieślowski Between Theory and Post-Theory*. London: BFI Publishing.

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<sup>1</sup> The dialectic of natural/unnatural reverberates down through the history of the bicycle from this false starting point. The high-wheeler or tri-cycles were not less natural than the safety bicycle, they were just different – different possibilities in the history of the bicycle. Indeed, the fact that they were ‘possible’ means that they are just as possible now as they were then.

<sup>2</sup> <http://www.bbc.com/autos/story/20150514-the-10-most-beautiful-bicycles-of-2015>

<sup>3</sup> While there is no high-wheeler among the designs on the BBC’s website, tri-cycles and quart-cycles often feature in constructionist narratives in the same way: as mis-design that did not make it into the final design or did not survive the interpretative flexibility period.

<sup>4</sup> Jesper Sølling has been accredited with bringing the design into production again. It was a part of Danish Craft Collection (a cultural heritage organisation under the Danish ministry of culture), before production was moved to Germany and the bicycle moved from the collection. According to the website of Danish Craft Collection, Sølling’s key goal was “to build a bicycle that people enjoy using [and] it should be functional and beautiful, but [...] also be a pleasure to pedal through the city’s streets and lanes”. (<http://www.craftscollection.dk/grouping/view/368>)

<sup>5</sup> Leth started collaborating with the Danish rider, Ole Ritter, in the early 1970s, which led to three ‘bicycle’ films by Leth, of which *A Sunday in Hell* is the last. The first was *Den umulige time/The Impossible Hour* (1974) on Ritter’s attempt at breaking the hour record on a track in Mexico and *Stjernerne og vandbærerne/The Star and the Water Carriers* (1974), which focus on the 1973 Giro d’Italia race.