

Thinking Long/Thinking Ecologically: Time Travel, Film and Ecological Agency in *12 Monkeys*

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In order to ‘tell a good story’ cinematic narrative must necessarily expand, shrink and re-order time and space. Flashbacks, jump-cuts and montages juxtapose scenes that are temporally and spatially distant so as to construct narratives that are accessible and comprehensible to their audiences. These formal aspects of film seem to make it particularly well-suited to engaging Timothy Morton’s notion of ‘thinking big.’ In *The Ecological Thought* Morton argues that recognising the ecological interrelatedness of the human and nonhuman, particularly via culture, compels one to ‘think big’ (20): to understand that an action undertaken here has consequences over there (even way, way over there). Additionally, while ‘big’ emphasises ecological thinking in spatial terms, it also includes the temporal (Morton 135)—a notion perhaps better emphasised by ‘thinking long’: an event undertaken now or earlier will have ecological consequences later (even much, much later). Because film constructs its worlds and stories through the juxtaposition of temporally and spatially disconnected scenes, ‘thinking big/long’ seems to be embedded (albeit latently) in its very form.

This discussion considers Terry Gilliam’s dystopian time travel film *12 Monkeys* (1996) as an exemplary instance of the way film both stages and interrogates the concept of ‘thinking long.’ *12 Monkeys* can be read as engaging with Morton’s philosophical musings on ecology and Gilles Deleuze’s philosophical ideas about time through its staging of the intersection between the deterioration of the subject and the environment, representations which arise through the film’s combination of a time travel plot, ecological catastrophe sub-plot, and use of postmodern filmic techniques.

By starting from the intersection of these particular conceptual, narrational and formal elements, I hope to foreground and analyse one of the film’s crucial plot points that dovetails with the concerns of ecocriticism, but which is backgrounded in the film itself and has been sidelined in its critical reception.¹ The aspect to which I refer is the film’s ecological subplot in which its dystopian setting is established as a consequence of the values and behaviours of the people of the past. Indeed, the film actively obfuscates this central connection until its climatic scene (Alain Cohen 153). Instead, the main plot centres upon chrononaut James Cole, who is ‘volunteered’ to travel back in time from the film’s present, 2037. In this time, humans are forced to live underground and under the totalitarian regime of the Scientists because the earth’s surface has become toxic as the result of the release of an engineered virus in 1996 that killed five billion people. Cole’s mission is to investigate a misfit band of animal liberationists, the ‘Army of the 12 Monkeys,’ whose activities end up having no relation to the virus whatsoever. In other words, Cole’s reason for returning to the past turns out to be a MacGuffin, downplaying the film’s pointed critique of the values of post-industrial capitalism, and also its own complicity in these values (that is, its willingness to collect box office profits).²

Staging 'Thinking Long'

12 Monkeys stages 'thinking long' through its use of a time travel narrative, which critiques the values and practices of post-industrial capitalism and the instrumental use of science and technology for profit. It does so by establishing a causal connection between the dominance of these values in the film's past with the uninhabitable environment that characterises the film's present. Importantly, the causal relation between the present and the past is not only constructed through the narrative structure of time travel, but also via the strategic juxtaposition of temporally distant scenes.

These juxtapositions enable the filmmakers to emphasise their vision of the interconnections between events, which, because they are separated in time and space, would be otherwise only dimly perceptible. For example, at one point in the film, *12 Monkeys* juxtaposes a scene from an undisclosed subterranean location in the present with a scene from the trenches of WWI—locations separated by considerable amounts of time and space. In the last moments of the scene from the present, the viewer witnesses Cole sealed within a casing of transparent plastic (reminiscent of the anti-contamination suit he wears when he journeys to the earth's toxic surface) and surrounded by technicians wearing various masks.

This image is directly followed by a shot of WWI soldiers wearing gas masks to protect them from the toxic air that marks chemical warfare. In bringing these two images together, the filmmakers represent a 'thinking long' which would otherwise be difficult to conceive. This juxtaposition develops a continuity between the film's temporally distant past and present: in this case, the connection suggests that the use of toxic air-borne technologies is not a novel situation, but has its roots in situations that occurred long, long ago.

This technique is used throughout the film to link material excess, science and technology and ecological catastrophe (for humans). Firstly, Cole's excursions to the past are used to reveal the (implied) motivation for the release of the virus. This information is disclosed in a conversation occurring in 1996 between Dr Peters, a virologist and perpetrator of the attack, and Dr Kathryn Raily, Cole's psychiatrist and love interest. In response to Raily's thesis about the Cassandra Complex—a psychotic disorder in which the afflicted believes s/he knows the future but is unable to change it—Peters comments: 'the planet cannot survive the excesses of the human race: proliferation of atomic devices, uncontrolled breeding habits, pollution of land, sea and air, rape of the environment. In this context isn't it obvious that [the] "chicken little" [story] represents the same vision [of catastrophe]? That homo sapiens' motto "let's go shopping" is the cry of the true lunatic?' Peters' eschatology highlights that he sees the values and behaviours of post-industrial capitalism and the military-industrial complex as leading to the inevitable decline of not just humanity, but of all species. Situating his actions within the discourse of environmentalism, Peters justifies his actions as an extreme measure of environmental mitigation. So while the event leading to the ecological crisis is caused by Peters' actions, Peters' comments suggest that the 'true' cause of the ecological crisis is material excess.

Secondly, time travel juxtapositions help to reinforce this association through the causal connections Cole makes between the values and actions of the past upon the present. While watching television in the 1990s, Cole sees a televised expose showing video footage of scientific experimentation on animals. This prompts him to comment: ‘look at them, they’re just asking for it. Maybe the human race deserves to be wiped out.’ Cole’s insight, like Peters’ observation, provides a justificatory framework for the release of the virus. That is, he suggests that the suffering that will be experienced by humanity in the future is justified retribution for (some) humans’ instrumental treatment of nonhumans in the past: the report’s voice-over can also be heard stating that scientists claim ‘the benefits [of animal testing for humans] far outweigh any imposition [on the animals].’ Here, via the conceit of time travel, the film pairs the instrumental use of the nonhuman by scientists with the ecological crisis of the future, Cole’s dystopian present.

Film, Time Travel, and ‘Thinking Long’

Importantly, the concept of ‘thinking big/long’ entails an ethical/activist component. Understanding the profound interrelatedness of things, ideas and actions, according to Morton, enjoins concern and consideration for how one’s values and behaviours impact upon the human and nonhuman other (not least because the concept involves perceiving that the well-being of the other influences one’s own well-being) (35). Interestingly, the film offers two ethical responses to ‘thinking long.’ One response is Peters’ extreme, and extremely misanthropic, reaction—his understanding of the interconnections between consumerism and increasing environmental degradation prompts him to design and release the killer virus. The film does not endorse this response.³ The other ethical response is associated with Cole who attempts to forestall Peters’ actions. Cole’s ethical response and its relation to ‘thinking long’ can be understood as emerging from his time-traveling experiences. In particular, these experiences lead to Cole apprehending the profound interconnectedness of subjectivity, society and environment across temporal zones. This, in turn, leads to his sophisticated understanding of time as repeated difference, which ignites his sense of ecological agency.

So how does Cole’s experience of time travel lead to his understanding of the interconnectedness of time as repeated difference? Throughout *12 Monkeys*’ opening act, Cole expresses his staunch belief about the impossibility of changing the film’s present by intervening in the past. When explaining the destructive outcomes of the virus on humanity to a panel of psychiatrists in 1990, Cole remarks: ‘How can I save you? This already happened. I can’t save you. Nobody can.’ Here Cole’s sense of agency is defeated by the ‘causal arrow’ of time which dictates that causes must precede effects (Marie-Laure Ryan 144). This, however, changes in the third act when Cole comes to understand his interaction with the past as producing difference. Cole voices this notion as he watches a screening of Hitchcock’s *Vertigo*: ‘I think I’ve seen this movie before. [. . .] It’s just like what’s happening with us. Like the past, the movie never changes. It can’t change, but every time you see it, it seems different because you are different.’ While Cole recognises that the past itself is not changed, his perception of his relation to the past is re-conceived by his experience of time as in excess. That is, his past experience of having viewed the film establishes a set of expectations as to what will

happen in the film. These expectations, along with the weight of experiences he has had between viewings, change his current viewing experience by inflecting it with traces of the past (memories) and future (predictions). In this way, past and future converge on the present producing a dynamic and fluid relation between them.

Cole's apprehension of time resonates with Gilles Deleuze's notion of the third synthesis of time (which he contrasts with the first synthesis, habit, and the second synthesis, memory) where past recollections and future anticipations produce a complex experience of the present moment (89–91). Deleuze argues that understanding time in this fashion undoes the simplicity of a circular understanding of time that sees history as constantly repeating itself. The third synthesis of time does this 'in favour of a less simple and much more secret, much more tortuous, more nebulous circle, an eternally excentric circle, the decentred circle of difference which is re-formed uniquely in the third time of the series' (91). The decentred circle of the third synthesis is transformative because each repetition of the cycle is different—difference is introduced through the recognition of the repetition of the cycle and the anticipation this produces.

Cole's insight, then, represents his transformed understanding of his ability to intervene in the past in order to change the present. Cole's dawning sense of agency, born out of his altered understanding of the relationship between the past, present and future, sees him accept a gun (albeit reluctantly) from a fellow chrononaut and attempt to kill Peters before he releases the virus. Despite Cole's failure to accomplish this task, his attempt to do so represents a significant departure from his previous resignation and signals his altered perception of his own agency and role in the shape of future ecologies.

This particular movie scene is also interesting insofar as it offers a way to interrogate the notion of 'thinking long.' That is, the particular event—one which acts as the catalyst for Cole's insight (viewing a film)—suggests that seeing and experiencing are as necessary as thinking for understanding this idea. In highlighting the necessity of these other sensory components to the emergence of Cole's 'thinking long,' I read the film as challenging the conceptual baggage accompanying the term 'thinking.' Put simply, in Western philosophy 'thinking' has been associated with the mind in the mind/body binary, which, in turn, is followed by a procession of linking postulates including culture/nature, man/woman and inside/outside. Importantly, by coupling 'thinking' with 'big,' Morton's concept itself tries to deconstruct such conceptual dualisms and dethrone the autonomous thinking subject as their locus. For Morton, conceiving of oneself as embedded in an infinitely large and complex 'mesh' of interconnections—the kind of thinking Morton suggests 'thinking big' entails—involves realising that boundaries separating self from other or culture from nature are permeable (39). Nonetheless, beyond the context of Morton's argument (and of poststructuralist theory more generally), 'thought' still tends to be drawn in oppositional relation to 'matter' as the privileged term in hierarchies that underpin the conceptual organisation of Western society. The term 'thinking,' then, insofar as it is still shackled to these traditional associations, runs the risk of reinforcing the very ideas that 'thinking big' seeks to disrupt.

12 Monkeys representation of the way Cole's 'thinking long' agency comes about helps to *flesh-out* the concept. Firstly, Cole engages with the concept of 'thinking long,' via his altered sense of agency, because of the particularities of his embodied experience of space and time. In other words, Cole does not arrive at this insight because he possesses some innate capacity for 'thinking long,' or because travelling through time necessarily promotes such an understanding, or because it is the meaning contained within the film he is watching (if the last were the case, then this meaning would be indifferently accessible and apparent to all the audience members). Rather, *12 Monkeys* suggests it is the unique combination of Cole's experience of *inhabiting* multiple temporal zones, along with his experience of *viewing* that particular scene from *Vertigo* multiple times, which enables his 'thinking long' agency. Indeed, the only insight Kathryn, who has only had the experience of inhabiting one temporal zone, gleams from viewing the same film is the rather pedestrian epiphany that she and Cole should flee to an ocean-side town to avoid the police. Cole's ruminations, in combination with his and Kathryn's contrasting responses to the film, emphasise that 'thinking long' is not a realisation hit upon only through concerted contemplation, but rather is the potential outcome of the intersection of the multiple components (personal, social and environmental) that constitute embodied experience.

Secondly, in this scene, the medium of film itself can be read as projecting outwardly 'thinking long,' which also helps to divorce 'thinking' from its associations with solitary and internal contemplation. The multiple intertextual references contained within the theatre scene open the possibility for this interpretation. As mentioned above, this scene directly references Alfred Hitchcock's *Vertigo* (1954) which appears as a *mise-en-abyme*. However, the particular scene playing from *Vertigo* also indirectly references Chris Marker's film *La Jetée* (1962)—*La Jetée* references the same scene from *Vertigo* in its time travel narrative, and *La Jetée* is credited as the inspiration for *12 Monkeys* in the opening titles. Significantly, these multiple intertextual links play out the content depicted in the repeated scene at the level of filmic form. The content of the scene from *Vertigo*, which prompts Cole to articulate time as repeated difference, problematises linear time and entertains the possibility of the co-existence of multiple temporal zones: while looking at the cross-section of a felled tree, the female character, who is supposedly possessed by a dead woman, points to the year of her birth and death. In *La Jetée*, a similar scene has the time travelling male character pointing to an area beyond the edge of a recently felled tree while the voice-over reports the time traveller as commenting that that point is where he is from (in other words, the future).

Finally, as already noted, Cole problematises linear and circular conceptions of time through the comments he makes in response to watching the scene from *Vertigo*. The filmmakers manage to connect all three films via this one scene, and as these brief summaries of the content of each version of the scene reveals, while each repetition is similar it is nonetheless different. To re-work Cole's phrasing: it is as if the central concern of understanding the complexity of time never changes, but every time it is re-worked by a filmmaker, it seems different because the filmmaker's vision is different.

What is interesting about this for my purposes is that by transposing Cole's insight to the level of form, the film suggests that the medium of film itself (insofar as film is highly

intertextual) carries the potential to disrupt audience's familiar linear perception of time. That is, the ability of the audience to recognise the ways films (deliberately) quote and repeat each other's tropes turns them into metaphorical time travellers: via the film viewing experience, audiences are encouraged to revisit films seen before—past and present become momentarily entangled when similarities are spotted, and then are gradually teased apart as the subtle (and sometimes not so subtle) differences between the films, and between the past and present selves who have viewed/are viewing the films, become apparent.

This externalises 'thinking long' onto the collective space of film, dispersing the locus of the thought across time (newer films reworking older films, and older selves revisiting the viewing experiences of younger selves) and space (filmmakers and viewers). In short, *12 Monkeys* represents 'thinking long' through the juxtaposition of temporally distant causes and effects and the sense of agency this experience of time travel helps instil in Cole, and also challenges the implied primacy the term places on 'thinking' by representing thinking to be but one component involved in the apprehension of the concept, and suggesting that the medium of film externally projects the concept in its very form.

'Thinking Long' and the 'Hamster Factor'

Despite Cole's renewed sense of agency, and despite the ease with which the device of time travel could have been deployed to justify a 'happy ending,' Cole's efforts to stop Peters and avert the deaths of five billion people fail. One reason the film resists such catharsis, I suggest rather sadly, is because, as Gilliam states of the film: '[i]t's a documentary' (cited in Ruben 315). That is, despite its science fiction trappings, the film attempts to approximate the reality of post-industrial capitalism, including its de-prioritisation of ecological concerns. Therefore, while the film stages 'thinking long' in its content and form, it ultimately denies this insight political traction because of its marginal status within the socio-economic context of post-industrial capitalism.

As Felix Guattari notes, post-industrial capitalism partly maintains its power by limiting and neutralising perspectives and practices that might distract individuals and industries from the profit imperative, which 'thinking long' does (47). Indeed, *12 Monkeys* suggests that Cole—the film's foremost figurehead of 'thinking long'—is impotent when it comes to influencing the shape of future ecologies because of the marginality of his social status. In 1996 he is incarcerated as a prisoner and interned as a mental patient, and his newfound insight into the follies of the instrumental use of animals associates him with the ideals of fellow fringe-dwellers, the Army of the 12 Monkeys. Cole, like the recognition of the profundity of ecological interconnectedness that attends 'thinking long', is marginalised within the discourse of post-industrial capitalism, impeding his ability to have any substantial impact upon its socio-physical stronghold.

Additionally, even though Cole has come to understand time as repeated difference, the Scientists have not. They do not perceive the subtle differences that exist between past and present cycles, and so unthinkingly (that is, by habit) they continue to repeat the

same ‘mistakes’. In particular, the ‘mistake’ that the Scientists of the film’s present reproduce is the logic of domination and instrumentalisation—what the film inscribes as the very cause of the ecological problem in the first place. That is, the Scientists use science and technology on the people of the present in the same way that science and technology was used on the animals in the past: ‘Cole [. . .] is literally encaged, living basically as a laboratory animal, being volunteered for experiments and missions that he cannot refuse’ (Alaimo 238). Indeed, the Scientists’ *use* of Cole to experiment with causality—the Scientists give Cole the gun to shoot Peters to see if they can prevent the widespread release of the virus—sets up a closed temporal loop in which Cole as a child witnesses his death as an adult. The circularity and inevitability of this depressing outcome is reinforced through the bookending of the diegesis with near identical close-up shots of the young Cole’s eyes in the film’s opening and closing shots. The failure of time travel to secure ecological restoration in this instance seems to suggest that science and technology, when they are used for domination and control, are blunt tools incapable of instigating or sustaining lasting ecological change.

Interestingly, given this argument’s interests in animal liberation and temporalities, Gilliam’s account of the ‘hamster factor’ as a motif of the filmmaking process provides a strikingly vivid image for this point.⁴ The ‘hamster factor’ refers to a particular shoot in the film that took much longer than expected because a seemingly insignificant background element—a hamster running in a wheel—would not run when the cameras were. Despite it being a barely perceptible aspect of the shot, Gilliam insisted the scene be reshot until the hamster ran as intended. The hamster stuck in its cyclical prison captures Cole’s predicament. Whereas the hamster was (presumably) freed once the shot had run as planned, Cole is forever imprisoned to run the same life cycle because the Scientists are unwilling or unable to relinquish their relation to science and technology as an instrument of control over the human and animal other.

In short, while Cole’s experience with time travel technology is transformative because it helps him to ‘think long,’ the marginalisation of his status and that of ecological discourses within post-industrial capitalism stifles his ability to effect ecological change. On the other hand, the Scientists’ encounter with time travel technology does not transform their worldview at all. As a result, they continue to deploy science and technology as a means of domination and control, which is shown to lock humanity into a cycle that leads to ecological catastrophe. So while science and technology have the power to transform ecological conditions, *12 Monkeys* suggests that they are prevented from doing so by the discourse of post-industrial capitalism that marginalises dissenting ideas, and also by the vested interests of particular groups who are reluctant to forgo their power over the human and animal other.

In summary, *12 Monkeys* stages and questions the concept of ‘thinking long’ through its content and form. The abrupt and nonlinear journeys of Cole between distant pasts and presents reveal how the building blocks of filmic narrative—the juxtaposition of fragmented images (and sounds)—lend the form to represent the concept. This point is bolstered through *12 Monkeys* use of time travel to establish causal connections between the values and practices of one time on the ruined ecology of another time. Furthermore,

12 Monkeys suggests how to *revision* the term 'thinking long' through its meta-fictional reflections on the ways viewing (and re-viewing) films can elicit a philosophical and complex notion of time (and space) from audiences. In this case, being able to apprehend the complexity of 'thinking long' is not so much an act of thinking, but its combination with the acts of viewing and experiencing.

In his discussion of the ideology of time travel narratives, William Burling argues, '[t]he ultimate powerful meaning of time travel as an "effective response" [to social problems] is not expressed in the manifest details but rather is produced by the very (f)act of offering a vision or proposal at all' (22). While *12 Monkeys* envisions self-interest as a roadblock 'thinking long' will have difficulty overcoming, by engaging and challenging the idea through its content and form, it encourages the kind of thinking and doing the film itself suggests humanity, as a collective, is not yet able to do.

NOTES

¹ Two analyses of the film of considerable interest to ecocritics are Stacy Alaimo's 'Endangered Humans?: Wired Bodies and the Human Wilds in *Carnosaur*, *Carnosaur 2*, and *12 Monkeys*', which illuminates the film's animal liberation plot and evaluates its premise that humans are 'endangered'; and Matthews Ruben's '12 Monkeys, Postmodernism, and the Urban: Toward a New Method', which considers the film's representation of the city by associating it with the tradition of the pastoral (4-5).

² Claudia Puig reports that in the 'top-grossing King holiday weekend ever' (as of 1996), *12 Monkeys* occupied the prime position at the 'top of the box-office chart.'

³ Morton too cautions against such measures. He identifies a similar misanthropic thread in some 'deep ecological writing [that] anticipates a day when humans are obliterated like a toxic virus or vermin', and responds by advising '[i]t's important not to panic and, strange to say, overreact to the tear in the real. If it has always been there, it's not so bad, is it?' (31).

⁴ The incident to which *The Hamster Factor* refers is included in the documentary *The Hamster Factor and Other Tales of Twelve Monkeys* directed by Keith Fulton and Louis Pepe. It is included in the Collector's Edition DVD of the film.

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