Abstract

Bergson's concept of 'mechanical inelasticity' from his influential essay *Laughter* (1900, 2010, p. 5) remains a staple of comic theory. Bergson's focus was on what impels laughter. In viewing the raising of laughter as a process – an interaction between the creator of the event and the recipient - we consider what resonance Bergson's key theoretical notion of 'mechanical inelasticity' retains for twenty-first century comic practitioners and spectators. Suggesting why 'mechanical inelasticity' has become fixed as Bergson's primary comic conception, we then posit that Bergson's highlighting of 'la vivante flexibilité d'une personne' (1900, 1924, p. 12) rather than his more famous definition of 'raideur de mechanique' (ibid) contains more theoretical and practical value for contemporary students and audiences of comedy alike. Finally, we propose another way in which Bergson's theory continues to 'perform a useful function' through 'the form of… significant undulations'(p. 64) or the 'wave' can initiate comic affect.

KEYWORDS: Bergson, Mechanical Inelasticity, Laughter, Waves, Affect

Sheldon: The philosopher Henri Bergson say it's funny when a human being behaves like a machine.

Leonard: I bet that bit killed at the Chuckle Hut.

The Big Bang Theory (series 7, ep. 12, 2014)

'Something mechanical encrusted on the living' [i]

Bergson's theory of mechanical inelasticity still holds considerable sway in the field of comedy studies. In their *Reader in Comedy*, Magda Romanska and Alan Ackerman note of Bergson's *La Rire* that, 'his essay… presents the period's most influential version of the incongruity theory of laughter' (2017, p. 188). In his essay, Bergson introduces the notion of 'raideur de mechanique' (1900, 1924, p. 12), originally translated in the English language version of the text as 'mechanical inelasticity' (1900, 1911, p. 10). As a theory of provocation

of humorous response, the term has been interpreted by scholars of comedy as a kind of pre-cinematic slapstick locomotion or a form of perceptible incongruity of movement in which the 'body reminds us of a mere machine' (1900, 2010, p. 11). As

Bergson's concept of mechanical inelasticity, along with his descriptions of 'rigidity', 'automatism' and 'something mechanical encrusted on the living' (1900, 2010, p.5, p.7, p. 13) undoubtedly serve as useful provocations for discussions of something abnormal or unnatural as being affective upon the spectator's laughter response. However, as Bergson himself philosophically suggests, these are only only 'for cases that are elementary, theoretical and perfect' (ibid, p. 8).

Bergson was a thinker of his time. Apropos the industrial age in general, Matthew Arnold had written in *Culture and Anarchy* in 1869:

> What is freedom but machinery? What is population but machinery? What is coal but machinery? What are railroads but machinery? What is wealth but machinery? What are, even, religious organisations but machinery? (1869, 1963, p. 50).

Machine age thinking permeated Bergson's social and cultural theorizing.

In fact, in the mid 1880s, Bergson was already beginning to distance himself from a firm position on theories based purely on the mechanistic. In a letter to the American Pragmatist William James regarding scientific time, Bergson wrote:

> I had remained up to that time wholly imbued with mechanistic theories, to which I had been led at an early date by the reading of Herbert Spencer. . . a series of reflections...brought me, by gradual steps, to reject almost all of what I had hitherto accepted and to change my point of view completely (Britannica online, 2019).

Similarly, in his 1896 work *Matter and Memory*, Bergson would clearly place his theories of the mechanistic within a much more human and body-related perspective, highlighting the idea of 'knowing from within'.

However, in *Laughter* what Bergson terms the element of 'the living pliableness of a human being' (1900, 2010, p. 5) became overlaid by modernist, Futuristic and cinematographic

readings of the machine in subsequent interpretations of his theory of mechanical inelasticity

and the legacy of his modernist mindset has influenced subsequent reappraisals of his work. His take on laughter has been co-opted by creative artists interested in the production of comic art. In N.F. Simpson's absurdist 1957 play *A Resounding Tinkle*, for instance, 'there is a long sequence in which the characters discuss Bergson's ideas on comedy' (Taylor, 1966, p. 61) while *One Way Pendulum* (1959) features 'the human being acting as – and consequently treated like – a machine (ibid, p. 63). As the physical performance teacher John Wright notes in *Why is That So Funny?* 'machines were the brave new world of the nineteenth century...words like 'mechanical' and 'rigidity of momentum' fail to warm the heart today, but Bergson's law of physical comedy intrigued me' (2007, p. 14). By the 1980s, Hari Kunzru suggests, 'postmodern bodies often suggested machinery' in the harnessing of 'robotic and unheimlich' performance styles that heralded a future in which man and machine become integrated in a sort of 'posthuman' fusion (2011).

Nonetheless, for Bergson, laughter - in all its multiple forms - can only be fully understood in the context of a group. It is a 'social gesture' that indicates "a slight revolt on the surface of social life", continually shifting and changing (2014:479). For Bergson, laughter emphasises the undulating forces that move between bodies; forces that "clash and collide with each other, as they strive to find their level" (ibid).

In this essay, we suggest that Bergson's wave analogy is more appropriate for contemporary comedy scholars than his idea of mechanical inelasticity.

However, waves can also be used as an analogy for the *feeling* of comedy and laughter. Langer, for instance, describes laughter as the "the crest of a wave of felt vitality" (1953:340). It is the culmination of a surge of feeling that may be small or big; sudden or slow, but - in most cases - will end with a climax, "at which point we laugh or smile with joy" (ibid). This way of understanding laughter is important, because it helps us to position laughter as a phenomenon in its own right, rather than as merely a representation of humorous materials (such as mechanical inelasticity).

We will therefore refocus the notion of mechanical inelasticity as a movement that Bergson himself describes as being situated within the corporeal. As he notes, it 'does not exist outside the pale of what is strictly HUMAN' (ibid, p. 3, *capitals in original*).

In attempting to reassess Bergson's theory in this way and to situate it within innate and intuitive corporeal movement, the body can, perhaps, at best be considered as a kind of physical 'machine', but one that, notwithstanding, behaves in a uniquely human manner. Rather than mechanical and inelastic, it is when operating in an eccentric or temporarily incongruous mode, more firmly located in the human, occurring through corporeal, elastic physicality, that connects us to laughter.

'A [mechanical] arrangement of acts and events is comic ...[with] the illusion of life'

Where did 'mechanical inelasticity' originate? In France, by the seventeenth century, ideas of mechanism were already becoming embedded. Descartes had posited that animals were mere machines while simultaneously taking inspiration for his philosophy from the mechanical Automata that were hugely popular. Automata, pre-cinematic forms of entertainment, ultimately enjoyed a 'golden age' between 1848 and the outbreak of World War One (Bally, 2003) and Bergson makes multiple references to automatism in *Laughter*. A tendency to separate the mind and human agency from man-made reproductions of the human were already in socio-cultural consciousness by the time Bergson wrote his essay. Although elsewhere in his writing, 'Bergson...disdained technological intervention in the arts, believing instead in ideas of pure, unadulterated perception and human intuition' (Dixon, 2011, p 93), Benjamin notes that, at the exact period that *La Rire* was first published, cinematic representations were becoming hugely influential. Early cinema, innovative and ubiquitous as a phenomenon, can only have further inspired Bergson's perception of comic movement in much the same way that automata had inspired Descartes' thinking:

> Around 1900 technical reproduction...captured a place of its own among the artistic process. For the study of this standard nothing is more revealing than the nature of

> the repercussions that these two different manifestations – the reproduction of works of art and the art of film – have had on art in its traditional form (Benjamin, 1982, p. 218).

From Muybridges' still photographs in 1870s, the earliest attempts to capture human motion through technological means, moving pictures soon gave rise to the cinema, and the utterly compelling notion of dynamism overwhelmed Modernist and Futurist thinking. Early moving pictures were indeed revolutionary. As Brownlow notes, earlier 'attempts to represent movement were lateral. They usually occurred on one plane...the motion picture...added the one element missing from other attempts at simulating movement: dynamism' (1973, p. 5). The cinema, by contrast, 'began with the study of motion, making... movement... an object of scientific interest and a spectacle in itself' (McKernan in Williams, 1996, p 108). By 1916, Marinetti and his fellow artists were to write in *The Futurist Cinema* of 'a school... of speed', using 'the cinema, born only a few years ago' as a form of 'theatre without words' (1973, p. 207). In terms of affect, fellow Futurist artist Boccioni had stated in 1913 that, 'we shall discover the MOTION, the impulse of the object. This motion is a quality, and, in our sculptural aesthetic, quality equals feeling' (ibid, p. 89, *capitals in original*), before citing Bergson's theory that '"any division of matter into autonomous bodies with absolutely defined contours is an artificial division" and elsewhere, "any movement, viewed as a transition from one state of rest to another, is absolutely indivisible"' (ibid). This seems to correlate with the idea of a kind of intuitive feeling and perceptual energy giving rise to affect. But, we wonder, in writing *Laughter* was Bergson himself somewhat over-influenced by the technical and mechanical properties afforded by the contemporaneous possibilities of early cinema? Did the live, human, intuitive and perceptual concerns inherent in Bergson's theories take a second place to innovative, technological considerations in *Laughter*?

Certainly, what Bergson understood by the cinematograph was clearly revealed in his 1907 work 'The Cinematographical Mechanism of Thought and the Mechanistic Illusion — A Glance at the History of Systems — Real Becoming and False Evolutionism' in *L'Évolutioncréatrice*. In this work Bergson allowed that viewing movement through the cinematographical prism supports and informs his theory of inelastic movement as being 'impersonal', generalised and subject to the control of mechanistic imperatives:

> It is because the film of the cinematograph unrolls, bringing in turn the different photographs of the scene to continue each other, that each actor of the scene recovers his mobility, he strings all his successive attitudes on the invisible movement of the film. The process then consists in extracting from all the movements peculiar to all the figures an impersonal movement abstract and simple, *movement in general,* so to speak: we put this into the apparatus, and we reconstitute the individuality of each particular movement by combining this nameless movement with the personal attitudes. Such is the contrivance of the cinematograph (p. 306, *italics in original*).

He further posits that the mechanical inelasticity idea borrows more from the 'unmovability' of movement than the potential for flexible and fluid human propulsion through the activation of mind and agency in performance:

> Action appears to us, no doubt, in the form of movement. But from the mobility of the movement we turn away as much as we can; what interests us is, as we said above, the unmovable plan of the movement rather than the movement itself. Is it a simple movement? We ask ourselves *where* it is going. It is by its direction, that is to say, by the position of its provisional end, that we represent it at every moment. Is it a complex movement? We would know above all *what* is going on, *what* the movement is doing-in other words, the *result* obtained or the presiding *intention* (p. 303, *italics in original*).

In viewing how humans moved through space cinematographically, Bergson may well have registered the available images of movement that were presented as unnatural and mechanically uneven. The cinematograph system was, it seems, even by 1896, prone to 'too much flicker…and joggle' (Hunningher, 1996, p, 48) while a 1906 commentator noted that the cinematograph used a 'headache'-inducing 'winking' pan (Bayley in Bottomore, 1996, p. 137). Later, when motion picture production gained more traction, the early cranking of film at sixteen frames per second meant that 'when ground slowly, the action would be speeded up. Slow motion was produced by grinding very fast' (Brownlow, 1973, p. 246). All in all, the essentially mechanistic turnout of early film production may have led to

apperception of artificial movement which, while resonating with Bergson's notion of the 'encrusted machine', nonetheless de-emphasised the flexibility and fluidity of the corporeal and relegated the human and bodily as the locus of the comedy.

Mundy and White note that Bergson's 'work does have considerable mileage in relation to silent, slapstick and physical comedy' (2012, p. 12) and this, perhaps, has permeated later thinking about mechanical inelasticity as comprising a kind of early cinematic, predominantly 'silent clown' (Kerr, 1980) mode of action. Added to the modernist preponderance for showcasing the artefacts of the machine age on film, e.g. the vehicles, factories and vessels that offered the possibility of increasingly speedy locomotion that made up the 'mechanical objects in Sennett's world' (Mast, 1973, p. 51), what can get lost in Bergson's, possibly overly cinematically influenced conceptualisation is the human element, even in, say, 'Keaton's physical comedy [that] is essentially a synthesis of malleable human flesh and Bergsonian encrusted machine' (ibid, p. 131).

'We regard it, above all, as a living thing'

Around the time of Bergson writing *Laughter*, it is also perhaps significant that live, theatrical movement underwent significant change. Andre Antoine had become director of the Theatre Antoine in Paris in 1897 and his work 'flew in the face of the established acting style.... the classical French actor would use the same gestures whatever his character; he would never speak when he moved' (Styan, 1981, pp. 34-5). A new form of fluid expressiveness took hold in the actor-focused mime, clowning and circus fusions favoured by practitioners such as Jacques Copeau, Michel Saint-Denis and Etienne Decroux through the Vieux Colombier school in Paris from 1913 onwards and later evident in the training of Jean-Louis Barrault. In wider Europe the methods of Adolphe Appia and Gordon Craig were similarly actor-centred and physical movement based. Bradby notes that, subsequently, an 'explosion of mime' became evident in the work of Jean Perret and Jacques le Coq in France in which 'everything moves' (2006, p. 121). In the Soviet Union too, not much in the way of mechanical inelasticity is discernible in the tendency to use subconscious routes to access movement and behaviour as suggested in, say, Grotowski's work on physical actions or in Stanislavski's actor training methods. Mechanical inelasticity as a prompt for affecting

spectators' laughter is rarer to find. Perhaps only Meyerhold's biomechanics seems to proffer some potential currency for the use of mechanical inelasticity in the sense of Meyerhold being able to 'manoeuvre his actors like puppets' (Hartnoll, 1968, p. 242). He also employed the language of industrial efficiency to roll out his training but, nevertheless, biomechanics was still essentially concerned with human movement. This bodily locus required balance, rhythm and expressiveness, trading upon 'the elementary laws of reflexes' (Gorkachov, 1957, p. 201). Modernist, naturalistic performance styles firmly place the performer at the centre of the affect and tend to move us still further away from the idea of the actor behaving like a machine.

In performance, moreover, humans can be funny in a way that automata cannot. Human performers can trade on the use of incongruous modes of locomotion and reveal the extremes of which the human body is capable to a range of different and various effects. Acrobats and dancers, for example, can provoke reactions of awe and admiration through their corporeal dexterity while comedians use comic movement (as in John Cleese's silly walk, Max Wall's eccentric dance, or Jacques Tati's strut) to raise laughter. People who move funnily can be, variously, flexible, eccentric, angular or awkward but that which prompts laughter does not seem particularly mechanical as such. In the 1920s, the soviet artist and director Nikolai Foregger, having introduced eurythmics, circus and commedia and music hall elements into the cabaret dance and ballet mainstream, could, arguably, be seen to be attempting to put Bergsonian principles into action in his *Mechanical Dances* (1923) in which he stated that 'we view the dancer's body as a machine and the volitional muscles as the machinist' (Goldberg, 2001, pp. 37-40). It is difficult, however, to imagine this dance as being capable of raising much in the way of laughter as a primary affect. Even forms of mechanical dancing as evident in Dadaist work, early twentieth century Soviet choreography, or even more recent robotic and hip hop dance modes, conceivably might inspire awe through the performers' dexterity – but laughter *per se* is, surely, seldom induced. In fact, alternatively, it is where the physical movements of the body are at their least recognisably machine-like and seem most to resemble the capability of human behaviour where laughter can be prompted. Compare, for example, Laurel and Hardy's surprisingly nimble but all-too-human dances in *Bonnie Scotland* (Horne, 1935) or *Way Out West* (Horne, 1937) with Chaplin's literally acting as part of a machine in *Modern Times*

(Chaplin, 1936) and 'his losing battle with a moving conveyor-belt, his entrapment in and regurgitation by the giant cogs of machinery, his insane dance with the oilcan' (Kerr, 1980, p. 38). Stott cites this film as being an example of 'vitality versus lifelessness' (2005, pp. 95-96). However, while the latter example may come nearest to demonstrating impressively Bergson's 'lifeless' mechanical inelasticity in action, crucially, it is the former's 'vitality' that is far more likely to inspire laughter in its fluid expression of essential humanity.

Ultimately, the body cannot really act as a machine to affect our laughter, operating as it does in tandem with our autonomous will, something that anything purely mechanical simply does not possess. In the human system of locomotion, body and will act in biological, neurological and physiological harness, working together in events of 'socially negotiated signification' (Ruthrof, 1997, p. 43). Comedy is more likely to come from occasions where the body has to readjust in live time to what the will is dictating. Take for example, the act of falling over. Bergson himself uses the example of 'a runner who falls' (1900, 2010, p. 5) in relation to mechanical inelasticity, describing 'a kind of physical obstinacy, *as a result, in fact, of rigidity or of momentum*, the muscles continued to perform the same movement when the circumstances of the case called for something else' as a form of 'absentmindedness' which acts as both the provocation of the fall and of the spectators' laughter (ibid, p. 5, *italics in original*). But, surely, rather than automatically, unconsciously and unilaterally tumbling, it is, instead, where we as spectators perceive the person consciously trying <u>not</u> to fall or slip that also prompts our laughter response. In the instance of the person slipping on the proverbial banana skin, 'the pratfall' causes the audience's laughter. As Susan Purdie notes of comic causes and effects, 'at the simplest level, performers themselves "utter" the pratfalls or gaffes which make us laugh' (1993: 15). In the case of the pratfall as an utterance, the incongruity of the event is prompted through violation of expectation and the perception of thwarted human dignity which, jointly, also conspire to create the comic effect. In perceiving the event as incongruous, two opposing phenomena clash i.e. the upright individual moving along pavement is the acceptable, normal situation, whereas a person sprawling onto the street is 'abnormal', out of place and inappropriate. In this 'gap' (a literal 'slippage') amusement through apperception of the contradictory nature of the forces at play raises laughter. Recognisable incongruity cues the spectators' laughter. Alternatively, on the physiological level, the event may involve the

comic principle of relief, in the purely biological response caused by the element of surprise, or shock, inherent in the sheer unexpectedness of the event. As viewers, the apperception of the painfulness of the situation moderates our response to the incident. As William Hazlitt noted in 1885:

> As long as the disagreeableness of the consequences of a sudden disaster is kept out of sight by the immediate oddity of the circumstances, and the absurdity or unaccountableness of a foolish action is the most striking thing in it, the ludicrous prevails over the pathetic, and we receive pleasure instead of pain from the farce of life which is played before us (1885: 66).

Crucially, in relation to mechanical inelasticity, in the case of the runner who falls or the person who slips on the banana skin, the conscious attempt to stop their fall involves the will taking over and instructing the actor's limbs to adjust to instructions in live time, causing a chain reaction of abnormal and incongruous actions or behaviours. In this activity, the one who utters the pratfall and the observers who witness it are operating in a 'dual processing mode' (Provine, 2000, p. 38). The activity and the interpersonal transmission or 'transcodification' (Elam, 1994: 85) of the different elements encapsulated within it are, ultimately, very far from machine-like, instead they are reflective of one body's ability to present unusual behaviour and for another body to be able fully register the human behavioural transaction that is being acted out. We laugh at the sheer human-ness of the manner of the fall and, as John Wright suggests, 'our laughter [is] triggered by the credibility of that slip' (2007, p. 14). The elastic way that only a human can authentically move takes us still further away from anything resembling automatism or the mechanical.

Bergson located his theories on laughter to social signification (1900, 2010, p. 4) and to childhood learning, devoting a long section of his essay to links to children's toys and their use (ibid, pp. 24-28). In relation to this notion of social education through play, perhaps, early learning to walk can be seen as a form of mechanical inelasticity that is also quite funny. Very young children's attempts to walk violate expectation of a flexible and continuous unfolding of live motion-in-action, resembling, perhaps, in some sense, Bergson's conceptualisation of mechanical and inelastic movement. As happens, for example, in 'the toddler who pauses awkwardly before falling higgledy-piggledy on his bum, or the child on the teeter-totter' (Friend and Pace, 2016).

Conversely, machines remain stubbornly inflexible, operating in a fundamentally inhuman manner. Unlike humans, machines behave in uncompromisingly resolute and predetermined ways and are generally non-reactive to anything that might arise unexpectedly. Ultimately, we might, in fact, only find laughter in machines' inelasticity rather than the other way around, as, for instance, in the old joke about the villains in the British TV sci-fi series *Doctor Who* (BBC: 1963 -):

> The unwise mocked their lethal armament (it resembled a plumber's rubber plunger and an egg whisk) and their inability to climb. A cartoon in *Punch*, a weekly satirical magazine, captioned them flummoxed by a staircase. "Well, this certainly buggers our plan to conquer the Universe" it read (*The Economist*, 2013).

In our exploration of Bergson's notion of mechanical inelasticity, we have demonstrated that - at the heart of the idea - is a Cartesian understanding of the mind and body as separate elements that are distinct from one another. Indeed, in *Laughter*, Bergson explicitly writes that the idea 'came from the fact that the living body… [is] rigid, like a machine'. For Bergson, we laugh when our attention is drawn to the material aspects of the body; when 'the body is no more in our eyes than a heavy and cumbersome vesture, a kind of irksome ballast which holds down to earth a soul eager to rise aloft'. In these moments, we are tantalised by the stupidity of the body, which gets in the way of the desires of the mind. When a person falls over, for instance, we are struck by the incongruity that exists between the human body and mind: the mind wants to go one way, and the body refuses. Hilarity ensues! And - while we cannot claim to be impartial to a slapstick routine - we have also acknowledged (along with Bergson) that mechanical inelasticity is an unsatisfactory explanation for *all* laughter. Right at the start of his essay, Bergson states that laughter is a 'living thing' (p. 2) with a logic of its own. To understand it, he states, 'we must put it back into its natural environment, which is society'.

Thinking of the laughter that *is* achieved through human movement in performance means that, perhaps, within the French tradition, Jacques Lecoq's work can come nearest to incorporating Bergson's mechanical inelasticity. Lecoq's methods are indicated in his summation of walking in which 'our gait is the personified form of mechanical walking'

(Bradby, 2006, p. 13). While otherwise warning against the presentation of 'a universe peopled by perfectly programmed robots' (ibid, p. 11), Lecoq emphasises that 'each of us walks with different 'faults' which go to make us an individual, different from all the others' (ibid). Like other performance practitioners and theorists, Lecoq steers clear of direct notions of the machine-like in representing movement and typically, he refers to the human will, as embodied cognition operating in any human movement activity. As Lecoq notes, his primary concern is that,

> My method aims to promote the emergence of a theatre where the actor is playful. It is a theatre of movement, but above all a theatre of the imagination...the motors of play which arise from the natural dynamics of human relations and which audiences recognise immediately. The dynamics I refer to are the shared references which are indispensable for both actors and spectators...we need to continually check these dynamic laws of theatre (2002, pp. 104-105).

In order to update Bergson's theory of laughter for a 21st century comedic milieu, then, we must try to capture the ways in which laughter moves playfully within a group of people.

The theorists that we find most closely parallel our own thinking in relation to movement with comic potential that corresponds to 'the dynamic laws of theatre' and that also offers insight into the workings of affect is to be found in the work of Felix Guattari (1930-1992) and Gilles Deleuze (1925-1995).As pointed out by Gregg and Seigworth (2010), the idea at the heart of Deleuze &Guattari's philosophy is a monist - or Spinozist - understanding of the universe, in which the mind and body are not seen as separate entities. In perhaps one of his most famous passages, Spinoza declares that 'no one has yet determined what the body can do'(1959:87), by which he means that bodies can do a great many things that cannot be put down to the mastery of the human mind. This idea had a big impact on Deleuze and Guattari, for whom the human body is a *process*,whose meaning and capacities will vary according to context. In *A Thousand Plateaus*, for instance, they argue that a body 'is not defined by the form that determines it… nor by the organs it possesses or the functions it fulfils' (1987:304). Rather, bodies emerge through specific intra-actions with other (human and non-human) bodies, in assemblages that are characterised by 'relations of movement and rest… capacities to affect and be affected' (ibid).

What we are suggesting, here, is that laughter emerges *within* a social group, affecting the bodies of the people that are a part of that group. It is not simply a response to a comedic stimulus, such as a person falling over. This is a fact that is acknowledged by Bergson, who points out that laughter 'is not an articulate, clear, well-defined sound; it is something which would fain be prolonged by reverberating from one to another, something beginning with a crash, to continue in successive rumblings, like thunder in a mountain'. We return, once again, to the idea of waves; rolling waves of thunder that move playfully between bodies, forcing those bodies to crease and shake.

As the comedy film writer Gerald Mast notes, 'Bergson, as useful a comic theorist as ever wrote, reveals uncomfortable lapses' (1973, pp. 3-4).

However, Bergson's notion of mechanical inelasticity, while if not exactly a 'lapse', is, at best, too incomplete an explanation as to what can provoke our laughter. Interestingly, Bergson also uses his 'wave' analogy to point to how difficult it is to understand laughter. The philosopher of laughter - he thinks - is like a child playing on the beach. The child attempts to gather a handful of the 'snow-white foam' that has been left on the sand, and is astonished to find that 'nothing remains in his grasp but a few drops of water, water that is far more brackish, far more bitter than… the wave which brought it'. Here, Bergson seems to be suggesting that - in his quest to understand this fascinating form of human behaviour - he has been left feeling unsatisfied.

By working with affect theory, we are also able to offer another way of understanding bodies as 'desiring machines' (Deleuze &Guattari, 1987) in which, crucially, the human 'channels' the mechanical, rather than the machine-like superimposing its pre-eminence onto the human or, as Bergson has it, 'a mechanism superposed upon life' (1900, 2010, p.16). If, in the end, Bergson's essay was intended as a philosophical provocation rather than as a definitive theory of comedy, our addition of affect theory enables us, in turn, to attempt our own contribution to the question of how laughter emerges within a group. In doing this, we are mindful of Bergson's caveat, remaining aware that our own surfing of the laughter 'wave' is equally subject to the inevitable 'crash' and 'collision' (ibid, p. 64) that accompanies any analysis of comic cause and effect.

Recently, the idea that laughter operates like a wave has started to gain traction within affect studies (Emmerson, 2017; Willett & Willett, 2014; Wyatt, 2019). Willett and Willett, for example, describe how laughter can rework the biosocial motility and porosity of bodies, 'functioning like waves rather than like properties of discrete individuals' (2014:88). This is due to the contagious nature of laughter. As anyone who has ever yielded to uncontrollable waves of laughter will know, this catching form of human behaviour troubles the idea that we are in conscious control of our behaviour. It can break down borders between people and groups, generating 'solidarity across identities now revealed to be fluid' (ibid). Going further back, Bataille asserts that 'those who laugh, together become like the waves of the sea' (1988:95), entering into a fragile 'compound being', where there is no partition between laughers (ibid). Bataille hears the sea itself laughing; laughing its absence of limits and the joyful coexistence of waves exposed to the touch of other waves (1988:77). Even though the unity of waves can easily decompose, the experience of communal laughter can be understood as a 'sonorous moment', with the potential of reverberating infinitely out from the event.

These ideas resonate with Bergson's essay, helping to pull us away from the rigidity of mechanical inelasticity and towards a more open, fluid conception of laughter. Using the example of a group of people on a train, for instance, Bergson writes that:

> However spontaneous it seems, laughter always implies a kind of secret freemasonry, or even complicity, with other laughers, real or imaginary.

Laughter, then, exists in the intra-actions of bodies that come together in a group. These bodies might have been tickled by an example of mechanical inelasticity, but they may also simply be enjoying the feeling of waves of affect moving between them.

Langer's bioaesthetic account of the comedic force of felt life is relevant here. As already indicated, Langer presents laughter as an expression of vital feeling particular to humans but connected to all of life through an affective atmosphere that is collectively felt (McCormack 2010, 2013; Stewart 2011). Laughter can be understood as a contraction of this super-saturated atmospheric intensity; the upsurge of a wave of feeling rather than an

individualised response to an external stimulus. The potential to laugh is always there, agitating in the atmospheric milieu of nonconscious bodily life. It is in this sense that we describe a preindividual atmosphere as *charged*: charged with affects, charged with potentials, charged with virtuality, charged with energy, charged with experience. We are possessed and convulsed with laughter as a 'surge of feeling', 'the crest of a wave of felt vitality' (Langer 1953). Only after the crest do we know (become conscious) that we are laughing, as a particular relation and expression of felt experience. The field discharges and recharges, and perhaps more laughter ensues.

'Tension and elasticity'

In the new digital world of the twenty first century, Bergson's ideas of mechanical inelasticity might be gaining more resonance. The 'posthuman-machine hybrid' (Causey et al, 2015) appears in new technologies and digital platforms and 'new technology is currently interested in delivering what is essentially slapstick comedy' (Mundy and White, 2012, p. 257). However, as Susanne Langer says, 'the human life feeling is the essence of comedy' (in Romanska and Ackerman, 2017: 271) and the kind of live comic affect that Bergson describes in *Laughter* is perhaps not best represented through mediated lenses. As Gomez Pena notes,

> It is simply impossible to 'replace' the ineffable magic of a pulsating, sweating body immersed in a live ritual in front of our eyes...no...robot or virtual avatar can replace the singular spectacle of the performance artist's body in action (cited in Heathfield cited in Fenemore in Pitches, 2011, p. 46)

As Bergson acknowledged from the outset of his essay, defining the causes of laughter are prone to 'slipping away...a pert challenge flung at philosophic speculation' (1900, 2010, p. 1). Nonetheless, we have tried to adopt, as Ladron de Guevara proposes, a 'semantic' bodily approach to 'understand[ing] our minds and bodies' in which 'the body acquires a semantic value that is inscribed within a semiotic system. The body is yet another text that needs to be interpreted and is open to be read' (2011, p. 24). This evaluation of mechanical inelasticity is different to Bergson's 'phenomenological approach, [in which] the mind is detached from the body's senses...the body often tends to largely disappear from one's awareness' (ibid, p.26).

Drawing from Delueze and Guattari, putting laughter as an affect at the centre of Bergson's analysis, we have attempted to indicate that the interplay between the body, mind and the mechanical has not hitherto been sufficiently teased out in previous conceptualisations of mechanical inelasticity. We suggest that it is the flexible, spontaneous and human in the acts of movement that predominantly causes our laughter, and much less so the mechanical, repetitive, rigid or inelastic. Towards the end of his essay, however, Bergson conjures the more natural image of 'waves on the surface of the sea' (2014:479).
Stott notes that 'Bergson helped comedy to be 'closer to the body than to the soul' (2005, p. 28) and for that alone, his essay on *Laughter* will long continue to inform students of comedy.

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[i] All headings are quotes from Laughter (1900)