



What Got Us Here, Won't Get Us There

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Not knowing with plants as animation practical strategy

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Abstract: This research aims to investigate the dualistic relationship between intention and craft in animation, through adopting “not knowing” as a collective practical strategy with plants. The animating contains a dualism between intention and craft, and indicates a power structure that craft should denote to the intention. This endowment shows as a single identity and continuity. While “not knowing” suggests an alternative labour division than the vertical one, which has been ubiquitous for both individual animator and animation industry, to employ not knowing is to evoke the creativity from material labour itself, instead of being driven by a constructed text centred destination. It also facilitates a spontaneity of technique without categorising techniques, presenting “a decision” instead of “choice”. To animate with plants employing not knowing strategy suggests a spherical time mode without clear division of the former and later in timing, object and subject, animator and audiences etc., throughout a shared ground of the generosity of vegetality, in which plants and human should be both regarded as animators.

Keywords: Animation, Craft, Not knowing, Plants, Animated jams

1. Introduction

This research involves an interdisciplinary and collaboratively animated jams workshop that functions as an innovative animation labour structure centred around the concept of “not knowing”. This workshop brings together animation students across universities in a park setting, where the focus is on animating the plants’ living adopting non-representation. This paper serves as the theoretical reflection on this animation practice workshop. This research aims to investigate the alternative relationship between intention and craft process that arises from embracing the concept of “not knowing” in animation, as well as to examine the alternative temporarily emerged from the human-plants relationship, e.g., animated time as mechanical, representational time, actual time and plants temporarily etc.

The animated jams workshop took place in a park with 6 animation master students. The fundamental rule was to animate plants' living with non-representation, employing any materials and forms. Each animator was tasked with animating a selected plant, comprising approximately 8-12 frames, and passing it on to another animator once their part was completed. This real time animating process in park was designed to be completed in a single round. This paper provides the theoretical research context and reflections on the workshop.



Figure 1. photo of workshop in park

2. Animate, and the dualism between intention and craft

Animation suggests a transformation driven by sacrifice, and thus introduces a power structure containing the dualism as well. The transformation presents a process from A to B, from one (or more) living to other (even illusion of) living; and a quality of sacrifice one to an ideal destination. As if one goes from one place to another, it must be firstly absent from one space in order to make sure its presence in the other spaces. Animation is a limited presence as so, thus, to animate is going through a structure of such limited presence between reality and virtuality. Linguist Mel. Y. Chen demonstrates the word “animate” as an adjective in English language dictionaries referring to “endowed with life, alive”, “lively, having the full activity of life”, “pertaining to what is endowed with life, connected to animals”, and “denoting living beings” (Chen, 2012, p.3). Though some of these definitions describe about a state of living, however, it also shows such a living state is not “living” within itself but the “living” bestowed, suggesting the existence of a pre-existing endowed state for “the living beings”. Thus, the word “animate” might allude to duality or multiplicity of living that one side is giving and one side is given. When the word “animate” employs as an action and process, it signifies a transformation from one living to another. For the giving side in animating inherently carries an ideal destination that is intrinsic to the process itself and the film apparatus. The given side of living beings manifest themselves within the condition of the completion and concealment the giving sides' subjectivities and the transformative process, resembling to present the mechanical time of a film might refer to conceal the actual time of filmmaking in the past and the actual time of playing the film now. Throughout the transformation, the given side, initially existing

as a mere idea, automatically antagonise, or at least regulate the giving side for its own embodiment within the limited presence. Eventually, there emerges a power structure in the action of animating that one should be concealed and dominated by another.

The result of being regulated by this power structure usually shows as a single identity and its continuity. The above-mentioned dualism is not difficult to be found in animation anywhere, for instance, the dualism of intention and craft in animating process, or the role of director and animators in animation industry etc. The explanation of intention could come from Paul Wells (2002)'s "the controlling ideas", illustrated as a starting point for all proposed creative works that "generates the questions must be answered in order to facilitate the most appropriate way that idea may be explored in the animated form" (Wells, 2002, p.11). It also "address[es] a specific theme or topic; the imperative to test the parameters of artmaking for its own sake" (ibid.). The subordinated position of animators to director in animation industry is also demonstrated by Thomas Lamarre:

Commonly, however, for the vision of one artist to emerge (say, that of the director or producer) in the production of a feature-length animated film, the skills and operations of the other artists must somehow align with yet remain subordinate to the overall vision of the one artist. (Lamarre, 2009, p.88)

As a result of this power structure, Paul Wells asserts that "fine art (craft in this case, or animators in relationship with director) is sacrificed to the fundamental requirements of the industrial model" (Wells, 2002, p.23). Although these statements focus more on the relationship between animators and director in commercial animation, however, I argue that it also happens for individual animator filmmakers that personally constructed intention might always tend to regulate material labour as a process of self-industrialisation simultaneously with animating. This sacrifice and regulation might end up with a single identity, for example, a certain, recognisable visual style among different animators, or a series of frames that are similar enough to be standardised into an illusion of continuity.

This regulation and its resulting identity could be regarded as the reason that animation is somehow neglected and differs from film theory. Animation theorists particularly emphasised that "form" which indicates a frame-by-frame constructed identity is core to making and understanding animation, rather than live action or film. For example, Alan Cholodenko argues that animation is "as child to live action's adult form" (Cholodenko, 1991, p.1). As "form" refers to "a particular type of something that exists in many different varieties", this word suggests an identity between varieties that has already marked the completed regulation by intention. Similar statements could be found in Kaustubh Ray (2022, p.159-159)'s argument that Ray compares animation thesis to film (in Deleuze's term: cinema) thesis — the former highlights on potential possibilities changing in between frames, which is seen as more significant than what exactly presents on each frame, while the later one is used to serve one shooting as a minimal element, consisting in transforming from one pose to another pose without reproduction and projection. Thus, animation is distinguishing from poses-in-sequence, nor movement-images, rather the forms-in-sequence. Insofar, as the power structure has already differentiated animation with "a lot of drawings" or "a large number of photos", it transformed materially and ontologically as the time-based outcome with the sacrifice of the raw material, e.g., drawings, photos, 3D models etc.

This dualism of intention/craft and the sacrifice of the material practice with labours' subjectivities and raw materials, is not only exclusive to animation as an art form. Instead, it broadly exists in many art forms such as modernist art, conceptual art, and minimalist art which directly divides concept (intention) that belonged to artists in a high position, and craft for whoever can work as secondary.

As John Roberts (Roberts, 2010, p.84) claims that “as a form of surrogacy: artist adopts a conceptualising role, directing the labour and technical accomplishments of others, without actually directly manipulating any materials himself”. However, animation, due to the reason above mentioned, might highlighted this power structure more strongly and radically than other forms, proven by animation being for a long-time seen as a disciplined subject, a (self or group) vertical labour division. The result there is either animators in animation industry, or part of individually material labour, being danger of losing autonomy. Paul Taberham (2019, p.27) points out that “commercial animations aren’t intended to be interpreted as the work of an expressive individual”; as well as Hosea stating, “the erasure of the animator’s individual contribution has been a product of the studio production system since the early days of animation” (Hosea 2010, p.26). I argue that even individual animators themselves might not be able to avoid this self-vertical labour structure alongside judging and self-criticism towards one’s won works. As large numbers of indie animators, even experimental animation with an anti-aesthetics, is driven by intention which although redirects the destination aesthetically locating towards another imperfection aesthetics, or a critique outside mainstream, remains under the dualism. *Wreck-it-Ralph* (2012) by Disney might be considered as a mark of an exquisite anti-aesthetics absorbing from experimental animation and strongly driven by the power structure. It presents a perfect imperfection aesthetics, such as sophisticated glitch effect and 8-bit style movement, by obedience to the standard and universal animating process with huge amount of money and labour. Wagner and Jang comment on *Wreck-it-Ralph*: “it is ironic that imperfection, purposeful imperfection in character design is now ‘in’” (Wagner and Jang, 2016, p.137), because such animation studio could tend to “employ such imperfect character design in the diegetic world rather than within the design process itself” (ibid.). The tendency towards such an imperfection as a temporal anti-aesthetic apparently is neither within the animating process itself. For instance, what *Wreck-it-Ralph* presenting is never an alternative workflows in animation that jumping beyond the step by step process such as script writing, character design, storyboard etc; but simply setting the ideal destination of the character design as “a girl generated by the error”; so the imperfection in *Wreck-it-Ralph* is an exquisite representation of imperfection rather than imperfection as a process. These situations and examples illustrate the widespread dualism of intention and craft in animation, even an anti-aesthetics animation. I would like to propose an alternatives practical strategy “not knowing” within animating making process itself instead of outsider anti-aesthetics, for slightly deepening to, or as an alternative thinking to animation’s precarious ontology.

3. Not knowing in art and animation

In recent decade, not-knowing is usually mentioned as a tactic of contemporary art practice. Rebecca Fortnum points out that artist’s creative process can be documented by identifying certain stages, procedures, and techniques rather than the generation process of “knowing” or “understanding”, as she demonstrates:

For virtually all artists, the search for the unknown outcome is not only welcome but provides a driving force within the creative process, as painter Paula Rego says “you are doing it to find out what the result will be” (Fortnum quoted in Rego). Artist want to encounter, in their final work, something that does not feel known to them.” (Fortnum 2009, p.70)

After Impressionism started a “deflationary logic” (Roberts, 2010, p.81) in the late 1800s, the absence of discernible skill has become a commonplace from Impressionism in the 1800s, to Cubism, Futurism, Conceptualism till contemporary art now. John Roberts describes this “radical

transformation of conceptions in artistic skill and craft" (77) causes "the dissociation of art and artist from the stability and assurances of tradition" (81), and "artist has to struggle to assert himself in defiance of tradition" (ibid.). The influence of deflationary logic of art has a complex influence on contemporary art today: on the one hand, as Rebecca Fortnum mentioned, artists regard the creative process as "make it new!" (Fortnum, 2009, p.72) and "enjoy[ing] the challenge of potential, and the pleasures of surprising themselves and so create spaces for not knowing, both physical and intellectual" (77) rather than stable inheriting from tradition like art in Renaissance period; on the other hand, similar to the emergence of sloppy craft, craft, materiality and intuition has been reiterated as deflationary logic towards "expunged personal touch" (Husbands quoted in McCullough, 1998, p.15-16) as well as a "declaration of intent" (Fortnum, 2006, p.113) as "a pre-set programme before starting" (ibid.) and "expectations that one should go forth with a clear agenda and plan and manage the work in relation to that intention" (ibid.) indicating "a right and a wrong" (ibid.) of artworks in modern art such as conceptualism and minimalism. As the result of this deflationary logic of deflationary logic (e.g., the deflationary logic in modernist art is to get rid of human touches, certain traditional technique and its following hierarchy, not knowing in contemporary art here tends to perform the role that getting rid of modernist art's idea that completely divides the intention and craft, abandon of human touches etc.), the reskilling in contemporary art of deskilling-reskilling in modern art, or the seemingly less radical transformation of radical transformation, instead of exclusion of material labour and setting certain declaration of intention as priority, some of contemporary artists have started focusing more on an unknowing unfolding of intuition brought from "their (artists') physical encounter with material" (Fortnum 2009, 78) during their making process as "post-intentionality" as an affirmation in the artworks. Moreover, not-knowing reconciles conceptualization and material labour into the process of understanding and knowledge as result. Artists might gradually understand their own intention alongside the making process, e.g., tactile sensation of different materials, sense of walking around the studio etc., instead of clarifying the destination before the material labour.

There are indeed various artworks employed not-knowing as practice method such as David Critchley's *Pieces I Never Did*; Bruce Nauman (2001)'s *Mapping the Studio* (Fat Chance John Cage); Beth Harland (2010)'s *Molecular* etc. But there is also potentially negative impact of application of not-knowing, as Emma Cocker describes: "It (not-knowing) is not inherently productive or generative nor does it always lead to new and imaginative lines of flight. Not knowing can be paralyzing, prohibitive. It can usher in the feelings of anxiety and embarrassment, the debilitating sense of being at a loss or lost, unable to see a way out or forward." (Cocker, 2009, p.126) Hence it might not be easy to persuade an animator to employ not knowing like other artists, because animation strongly relies on a text, as well as has less tolerance with mistakes, errors and failure because of its requirement of large amount of mechanism labour. But there are still animation cases adopting not knowing both individually and collectively that revealing its alternative creativity.

Peter Millard might be seen as one of individual animator employing not knowing during animating. The animating process for Millard is a "just go for it"¹ section that chooses to temporally forget the intention and controlling idea, and it results in the spontaneity and authenticity of personal technique. As he describes his own film: "They (Millard's protagonists) are an extension of myself I feel ... You touch on their vulnerability and seeming to not know what is going to happen to them. I guess that's life isn't it though. We are all vulnerable and don't know what will happen tomorrow. Live everyday as if it's your last and all that because like in my characters cases, you never know if a big banana might squash you or you will do a huge never-ending fart and disappear" (ibid.), each

¹ Peter Millard – motion – drawing | EN. (n.d.). Retrieved November 7, 2022, from <http://motion-drawing.com/interview-peter-millard/>

image (or frame) might recall or evoke animator's uncanny memory and thus animating as a continuity labour is not totally being designed, constructed and dominated by the ideas but self-generating texts and meanings. Forgetting as partly not knowing about animator's intention, in this case extracts the related texts into an emotional singularity and empowers material labour to distort the intention itself.

Addition to individual animators, "animated jams" could be counted employing not knowing as a structural tacit in collective animation. "Animate jams" is introduced by Lorenzo Hernández as:

[regarding to "jams session" by musicians, animated "jams" are] those collective films where several independent animators are invited to contribute with a scene, freely adapted to a guideline or basic requirement — as when jazz musicians periodically return to the same musical theme during the "jam session"... Such a common premise, which can be a format, a visual pattern, or a generic theme, serve to animators to make the continuity between different scenes easier, resulting heterogeneous yet coherent films. (Hernández 2016, p.2)

The paradigmatic examples of this film genre include *Anijam* (1984) by Marv Newland which Marv Newland designed the characters and various first and final frames to each animators without letting them know what would happen before and after; *Animated Self- Portraits* (1989) by David Ehrlich that gathering 27 famous animators to create scenes about themselves, and *Absolute Panushka* (1996) by Christine Panushka which invites 32 animators from all over the world to depict *Absolute Vodka* for 15 seconds and won several international awards.

Animated jams as collectively structural not knowing, encounter alternative creativity in a way of self-betray. Animated jams is uncontroversially a more autonomous division mode of collective production altering to vertical division of labour. Unlikely intention tends to be partly forgotten by individual animator, in animated jams, intention shows incapacity of being generated due to unknowability of others from differentiation. And it thus irresistibly becomes a destination that dooms not to be arrived, a path that dooms to be distorted, weirded failed and eventually self-betrayed. This quality of self-betrayed emerges even in a well-structured or prevailing aesthetics. For instance, in *Anijam* (1984), a well-pre-designed animated jams project, director well-designed the character, tango as main theme, and a tendency of movement. However, audiences might still clearly figure out how each animators betray tango and replace those movement with something else such as Da Vinci's drawing or some geometric abstract shape etc. Instead of Walter Disney's role in his studio that "move[ed] from actually making the films to facilitating their production ... (and) operated as 'a person who prompts and executes the core themes, techniques and expressive agendas of a film'" (Wells, 2002, p.63); the role of director in animated jams transfers into the reconciliation based on the respects and appreciation of differentiability rather than ordering, ruling and taming into a unity. Thus, it allows a spontaneity of material labour without categorisation of technique for choosing and obedience throughout its self-abandon towards power of judgement. As a result of this failure and rejection within power of intention, adopting not knowing in animation also usually creates a playful humorous in both process and outcome. Animated jams as collectively structural not knowing, encounter alternative creativity in a way of self-betray. Animated jams is uncontroversially a more autonomous division mode of collective production altering to vertical division of labour. Unlikely intention tends to be partly forgotten by individual animator, in animated jams, intention shows incapacity of being generated due to unknowability of others from differentiation. And it thus irresistibly becomes a destination that dooms not to be arrived, a path that dooms to be distorted, weirded failed and eventually self-betrayed. This quality of self-betrayed emerges even in a well-structured or prevailing aesthetics. For instance, in *Anijam* (1984), a well-pre-designed animated jams project, director finally designed the character, tango as main theme, and a

tendency of movement. However, audiences might still clearly figure out how each animators betray tango and replace those movement with something else such as Da Vinci's drawing or some geometric abstract shape etc. In this case, director might have the controlling idea that he/she would like the character to perform in a certain way. But within such a labour structure, opposite to pursuit a perfect presentation of that intention, this intention is however can hardly achieve anyway. Instead of Walter Disney's role in his studio that "move[ed] from actually making the films to facilitating their production ... (and) operated as 'a person who prompts and executes the core themes, techniques and expressive agendas of a film'" (Wells, 2002, p.63); the role of director in animated jams transfers into the reconciliation based on the respects and appreciation of differneciality rather than ordering, ruling and taming into a unity. Thus, it allows a spontaneity of material labour without categorisation of technique for choosing and obedience throughout its self-abandon towards power of judgement. As a result of this failure and rejection within power of intention, adopting not knowing in animation also usually creates a playful humorous in both process and outcome.

4. Vegetality and spontaneity

The rejection within intention itself might be the reason why adopting not knowing, especially in which be with plants, usually leads to a "decision" rather than a "choice" in the aspect of animating technique. Gary Peters (2009) elaborates the logic of work in knowing and declaration in which artwork is unavoidably generated within the artist's expectation through a series of aesthetic choices between "yes" and "no" of a space of "pre-given". The outcome of work might present the limitation of choices due to "the first mark and the subsequent marks of the work's continuation are arrived at through a series of choices that inevitably draw upon the available patterns of marking that silently/invisibly inhabit the unmarked as an insistent possibility" (Peters, 2009, p.2). Because the language of technique is not allowed as a result of no reflection, for instance when one artwork shows as singularity it can hardly be classified and thus the technique cannot be titled or named, the choices of technique thus turn to decision "ahead of yes and no" which allows art (animation in this case) "throw[ing] off its aesthetic garb and acquires ontological significances as the necessary break not only with the either-or of choice but also with the no less contingent binary of the artist and the artwork" (Peters, 2009, p.2). Such a decision would not erase the technique as part of making process, but might conceal its textual description and categories. The affirmation of not-knowing for Gary Peters is a fascinated action that "the artist remains within it (art)" (5), and "speaks from within the essential solitude [of art], not as one 'in the know' but, rather, as one cast aside by the work as it dis-closes its incomprehensible truth-event" (8) which leads artist (animator) live within the singularity of art (animation, or the timing of presence). In other words, decision brings the spontaneity of technique shown as singularity of technique and timing.

Thus, we might be able to connect this spontaneity of technique, emerging throughout not knowing, with vegetality demonstrated by Michael Marder. Resembling to a decision ahead of "yes" and "no", series of choices of techniques and aesthetics, vegetal life describes by Marder as "lacks an objective ends" (Marder, 2013, p.38) and "a wild and potentially unnameable proliferation" (52). It leads to the "non-conscious intentionality" (of vegetal life or plant souls) that ontologically folding the subject and the object into "an essentialism-free way of thinking that is fluid, receptive, dispersed, non-oppositional, non-representational, immanent, and material-practical" (152). This non-conscious intentionality "boasts neither a self to which it could return, nor a fixed, determinate goal or purpose that it should fulfil" (153) and "uncontrollably splits and sills out of itself, tending in various directions at once, but always excessively striving toward the other" (154) resembling to the material practice without the controlling of intention, and self-generating for detouring and weirding all the time. I assume here the existence (or at least, the potential or reflection) of vegetal being within human

being refers to Marder's demonstration that "the human is not only human but also a potential animal and a potential vegetal being" (157), rather than taking over the action into a mode of non-conscious intentionality and hence forms a sharing common ground based on "the dispersed life of plants" (51) which is "a mode of being in relation to all the others, being qua being-with. Dispersed in acts of living, all creatures share something of the vegetal soul and are alive in the most basic sense insofar as they neither coincide with themselves nor remain self-contained, but are infinitely divisible below the death masks of their identities" (ibid.). And so that, for audiences, sharing with the potential of plant souls, according to Marder's definition, the authentic spontaneity of films employing not knowing offers a permission and invitation to correspond to this shared community by rather being told or understanding one situation in a reading way, or in a way that human understanding knowledge, on the other hand, subjectively join the performance via non-conscious intentionality. In the animated jams workshop I held in park, because there was no limitation of materials allowed to be used, there came various types of technique of animating, including doodling without looking papers and clay, direct printing, buried frames into soil, rubbing papers with tree and grass etc. These techniques, under structural not knowing with vegetal sharing ground, tend to present an ontologically retrospective authenticity to the original materiality that being static being rather than an ordered sequence. For instance, being drawings instead of frames; being clay sculpture instead of a series of captured photos etc.

Plants and human shares a grounding of flux identities and thus also the authorship throughout animation. Plants in this research should have been designed as a silent and unknown object to human participants at the first time. But with the development of practice, I realise that plants should not be overlooked as mere silent objects. I would like to propose that instead of asserting plants' subjectivity is non-existent or hardly decoded, plants essence is (merely only) able to be approaching through conducting a certain structure shifting between perceptible time and its negation — in a sense — animation. And thus the action of manipulation of time in animation could be regarded as representation of plant essence through human agency. Michael Marder demonstrates the relationship between plants and time as: "The time of vegetal growth (and of decay, too) illuminates this character of time as such. The increase or decrease of a plant's extension may be observed only across an interval of not attending to it, a gap, in which something has been imperceptibly going on" (Marder, 2021, p.338). As if human can hardly perceive plants temporarily by keep staring, but inadvertently glance: staring at plants might plunge into the uncertainty — is it growing, or is it not? Only relying on the absence of gazing human might be able to connect plants actual image in front to the past images in memory and realise plants temporarily. That is to say, the action plants suggesting their subjectivity for human as audiences to observe, as well as the action of human observes plants' timing throughout lived animation in real time and real world, is an action that plants are animating themselves and are animated throughout shifting perceived between the present and absence of humans' vision apparatus. This silently happened revealing and perceiving of vegetality could be seen as a performative or lived action animation which presents the weirdness of being of time that pulls both plants and human into "a twisting and turning ramified, wayward temporality that holds every sense of being in time in a vegetal embrace" (ibid.), a withdrawing of division of subjectivity and objectivity. It thus refers to the generosity of vegetality and results at a sharing being of identity of animators for both plants and human. For plants, the situation resembles to Birgitta Hosea's lived animation *White Lines* (Kinetica Art Fair 2010 and Shunt, London 2010) that "animator draw white lines upon herself within a larger than life holographic projection of the same performance drawing" (Hosea, 2010, p.365) which the subject is object, animating and animated, performer and animator simultaneously. For human, this animation presents a similar identity structure to Bruce Nauman's *Going Around the Corner Piece with Live and Taped Monitors* (1970) that makes visitors (human) to be both audiences and animators. Overall, this animation of vegetality evokes the generosity presenting as the unification of subject and object and a sharing vegetal ethics

of authorship for both plants and human being animators. Perhaps the sharing ground between human-plants can be regarded as the result to the time gap between visibility and invisibility. Based on this vegetal ethics, I argue that any manipulation of timing in animation should be regarded as an action of confirmative response to that sharing authorship and thus as well as subjectivity of not only human, but also plants.

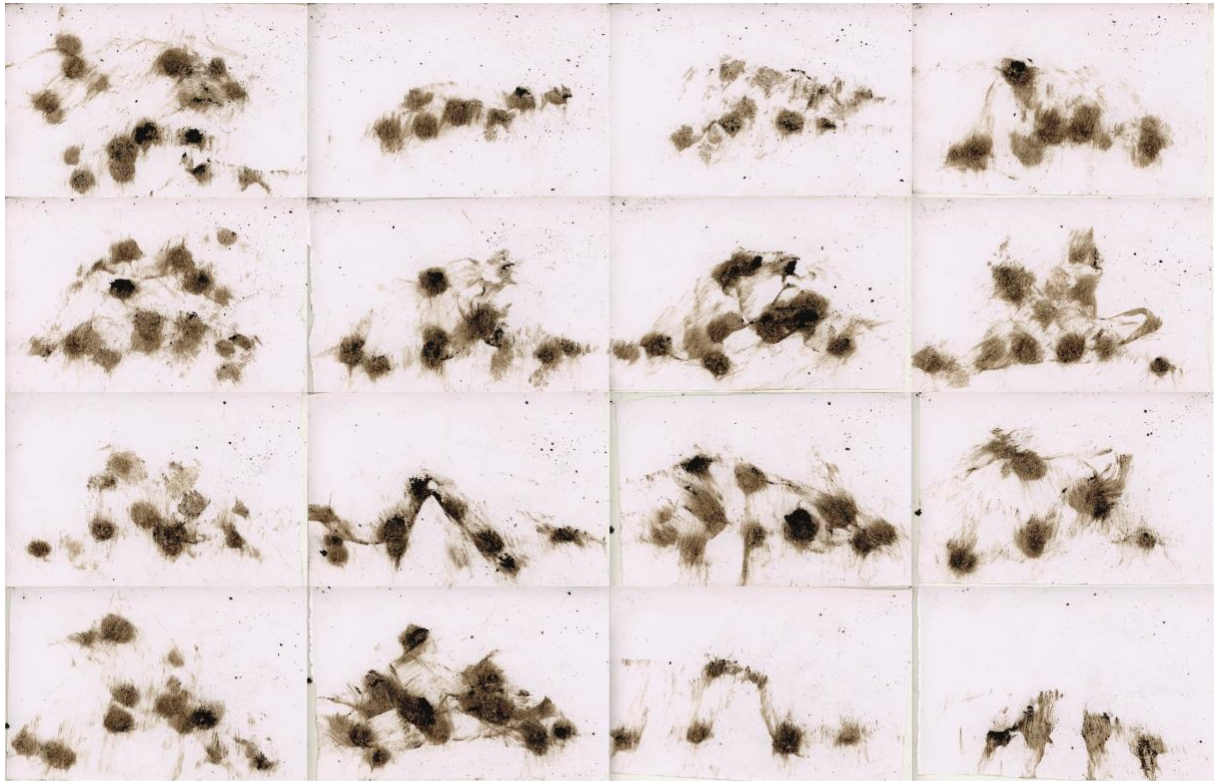


Figure 2. *disordered frames outcome 1*

5. Not knowing time

Animating plants in actual time (e.g., in this workshop, this method shows as participants do a series life drawing of plants, and so that it becomes an animation sequence) opens up the intriguing possibility of a spherical time mode, where objects move in a disorientation way instead of a linear driving into certain direction. Based on the frames collected during this workshop and feedback from peers, it is evident that the majority of frames exhibit a quality of disordered time. Animators found it challenging to distinguish the chronological order of frames. To address this, I composed these drawings randomly within a sequence, allowing each image to appear at various positions, for instance, one drawing could be placed in the first frame, second frame or last frame etc, rather than normal animation where one drawing is usually designed before/after other certain images. Surprisingly, this disordered sequence maintains continuity, with the images pulsating and subtly moving in irregular ways. It is important to note that this disordered sequence does not completely strip the images of their identity as an entity. It differs from flashing and ruptured sequences commonly seen in experimental animation, where the intended purpose is to deliberately undermine the identity of the images. In those cases, the order in sequence may be in disarray and less important, for instance, some sequences constituted by various etching images in the *Death of Stalinism in Bohemia*. In these cases, the identity of one sequence, which normally presented by large amount of similar images in character animation (e.g., series of similar images of Donald Duck

in a sequence of Donald Duck's performance etc.) is purposefully undermined, it might emphasis more on a share theme among different objects as the structural identity. For instance, the etching sequence in the *Death of Stalinism in Bohemia* (1991) might focus more on the ideology of collectivism as the identity rather than a specific character. Thus frames in not knowing plants animation workshop differ from both flash sequence where the representational single identity transfers into an ideologically structural identity, and typical ordered sequence found in character animation, in which object's representational identity is created across a series of similar images transitioning from pose to pose. Similar to Plasmatic and Metamorphic Movement, these frames reside in a realm between the single representational identity of images in a sequence and the structural identity of a sequence. Ray characterises PMM as a "manifest process" that "connects differences into becoming but not necessarily through representational though ... [in which] identity is problematised as PMM transgresses the limits of substance potential, the combination of structure and matter since matter is absent, structure is all there to cognition" (Ray, 2022, p.166). The difference between not knowing plants frames and PMM is that PMM visually showcases disorientation through transformations among different objects while adhering to a linear sequence order (otherwise it might become a flash sequence), but for not knowing plants frames, the linear sequence order is deviated, yet the potential for the amalgamation of identities remains relatively intact.

This disoriented sequence is rarely found in either films or animations, especially those presented as video on screen. The reason behind is the tendency of mechanical film apparatus to approach recognisable and representational time through images, which requires a unified form made up by equidistant duration between each frame to create the illusion. This tendency, inherent in the film apparatus, precedes the intentions of any animators, and serves as a precondition for video in any form. This intention of the film apparatus aligns with "the abstract idea of a succession, of a time which is mechanical, homogeneous, universal, and copied from space, identical for all movements" (Deleuze, 1997, p.1). The equidistant duration is fundamentally established by default in video itself for creating the illusionary mechanical time and serves as a foundational principle for animation discipline to manipulate the representational time. Furthermore, this mechanical intention of the film apparatus becomes even more evident in digital animation, particularly when considering the user interface of animation software as its digitally externalised embodiment. This mechanical intention can be readily observed in software features such as timelines in animation software like TVPaint or Toon Boom Harmony, as well as frame rate settings in application like Final Cut and After Effects. Mastering this equidistant duration between frames is to master animation itself, especially for those who "conform to a certain mode of realism concordant with live-action film-making" (Wells, 1998, p.11). Deviating from this fundamental intention could be considered as a departure from animation itself, or, at the very least, from video on an ontological level. Consequently, I propose that animation, as well as films, may encompass the folding of "the abstract idea of a succession", mechanical time, and actual time. Animators, as private (or prior) spectators, process and complete this folding. This does not however imply that animators have a clearer awareness of this folding than other spectators, rather, they may be inclined to conceal the process and existence of mechanical time due to the completion of attachment for the mechanical time to the actual time is the completion of animating, which is their works. However, the gap between mechanical time and actual time can still be observed in some animation installations. For example, Hugo Glover's *Hand-powered mutoscope* (2014), which is manually operated and presents varying durations between frames based on the speed of the hand crank. And the "Push" zoetrope (2017), which is driven by fire and exhibits different playing speeds and frame rates, ranging from stillness (slow) to liveliness (fast), and ultimately returning to stillness through burning. Glover's works showcase the discrete sequence movement of the actual time, the inconsistency between mechanical time and actual time, where the spatial distance between images differs from the duration between frames.

Similar to Glover's animation installation, not knowing plants animation workshop explores the incongruity between actual time and mechanical time, manifested as the irrecoverability of duration in actual time. Another previous workshop I conducted, the Round Table Animation (RTA)², can be seen as another attempt to approach discretised mechanical time by not knowing the representational objects. In RTA, participants followed a rule where each person started a drawing as the first frame within 2 minutes simultaneously and passed it to the next person. The next person was only allowed to look at the previous one drawing and had to continue animating without using a light box. The outcome video from RTA exhibits similarities to PMM, resulting in a "plasmaticness ... [that] rejects of once-and-forever allotted form, freedom from ossification, or the ability to dynamically assume any form" (Eisenstein, 1986, p.21) or the "primal protoplasm, not yet possessing a 'stable' form, but capable of assuming any form" (ibid.). The images, representational objects, there are always uncertain in a flux as if they remaining in the process of "possessing a stable form" (ibid.) forever. Hence, I regard RTA adopting the representational flux instead of any certain objects to evoke an uncanny space rather than time. The reasons might be constituted by two factors: firstly, all participants were trained and skilful animators who were capable, albeit too capable, of animating within equal durations time structural, as well as that we confirmed the fps beforehand; secondly, the frames were composed and presented as a video, thus it is unable to deviate from the intention of film apparatus. The outcome of RTA showcases visual disorientation in the uniform velocity of representation without re-directing the quality of time. Thus rather than revealing the disorientation the time folding, images in RTA might be closer to the virtual disorientation leading to any-space-whatever (further explanation in later paragraphs) and functions as the disorient memory. Back to plants workshop, to animate plants in real time reveals the impossibility of isometric duration and, therefore, the impossibility of representation in general as well. This impossibility to representation can be attributed to two reasons: firstly, the inherent limitations of human to capture the timing and thus subtle movements of plants without the negation of time or mechanising plants' temporality; secondly, the inability to guarantee that each drawings was completed within exactly the same duration — in this workshop, plants' movement happen simultaneously with animating like the life drawing, thus pursuing consistency between the representational time and the actual time suggest to ensure the moments drawn are equidistant in real time (for instance, the moment animator chooses to depict might be the same plant in 10.51, 10.52, 10.53 etc.), and also to ensure that the actual time of drawing one frame is equal or shorter than this equidistant real time, for example animator has to complete the drawing for plants in 10.51 before 10.52, which is overall impossible. Hence the animating process here embodies the conflict between continuity and discreteness. Such images produced in this workshop differ from a form-in-sequence, as sequence implies the existence of a pre-established framework that has already evenly divided the temporally copied space. They also differ from movement-images, which heavily rely on the physical movement of the camera and so that it is able to create a movement within movement, as the term defined by Colebrook as "indirect image of time ... [that] the camera does not organise images from a fixed point but itself moves across movements" (Colebrook, 2002, p.32-33). Both form-in-sequence and movement-images indicate there has already been mechanical time folding into, showing as sequence device in former, and camera itself in later. The images in this workshop might be categorised as "form-in-disordered-sequence".

The inaccessible nature of experiencing actual time and plants' time raises doubts about the possibility of accessing the subjectivity of plants for human beings. Do plants' subjectivity also remain completely inaccessible to humans? According to feedback from peers, some of the animators considered that they were animating their own mood rather than plants. In Victoria Grace Walden's

² Full video is available at: <https://vimeo.com/800349815?share=copy>

Cinematic Intermedialities and Contemporary Holocaust Memory (2019), Walden explores the “philosophy of in-between”, which allows humans to approach the inaccessible through a comprehensive cinematic experience that exists between images, media, materiality and bodies beyond representational values. Walden’s notion of non-representation refers to alternative sequences of images rather directly depicting or documenting Holocaust scenes as they appear in films or animations related to the Holocaust. These sequences are not merely non-figurative or abstract. For example, in the film *Free Fall*, Walden describes a scene involving “a caged leopard and slows the image of smoke rising from the funnel of a steamboat [which] strangely evocative of the Holocaust” (Walden, 2019, p.39). Similarly, in the animation *Silence*, Walden explores “non-human forms of expression performed by the illusionary movement of marks, lines and colours” (126). These non-representational scenes subtly leave the blank space for spectators to engage with memory in a sensory way, particularly when the films do not offer clear audio or visual representation. These non-representational scenes subtly left the blank that evoking spectators’ haptic engagements with memory, “especially when they (films) do not offer clear audio or visual representation” (55), and functions as “bodily dimensions of that viewing encounter helping us to ingrain specific pasts (that we did not experienced first-hand) into our own memory — to consider them personally important” (ibid.), and thus the experience with films can “become part of one’s personal archive of experience, informing one’s subjectivity as well as one’s relationship to the present and future tenses” (Landsberg, 2004, p.26). By presenting the inaccessibility within the inaccessible, the blank spaces within these non-representational works allow spectators to enter a multiplicity of time sheets — “the (affect) assemblage”, defined by Deleuze and Guattari as “characterised not only by the multiplicities within them but also by the potential for further expansion of the possible connections available” (Deleuze and Guattari, 2004, p.7) where “any point can be connected to any other” (ibid.). What’s more, according to Walden, animation sometimes suggests an “any-space-whatever” due to “the fact they(animations) are often decontextualised from real lived space” (Walden, 2019, p.127). For example, encountering a living puppet in real life might be hard to imagine, not to mention experiencing not smooth time in real life like what stop-motion animation usually presents. This decontextualisation, while partly blurring the signifiers of animation, however offers a broader entry point for audiences. For instance, animated plants living or non-representational plants might allow more audiences to access the plants-human affective assemblage rather than real film about plants, it to some extent lowers the viewing threshold which limited to particular memory to specific plant, specific area and period etc. It grants permissions for diverse identities to engage with the film/animation, creating affective recollections in virtual time, where the mechanical time of the film/animation becomes attached to past actual time through the act of experiencing the film/animation, and transfers into the potentials to merge as actual time again in the future. Overall, experiments with non-representational film/animation support an entry into affective assemblages, where different points can be connected through memory as virtual time. Therefore, even if human cannot directly experience plants’ lives, as Walden experienced the absence of firsthand experience and memory of Holocaust, human and plants can still share an affective ground. Non-representational film/animation, as affective images, becomes a recollection and potential to emerge in the future actual time ethically, for instance, in plants case, it might help avoiding falling into plant-blindness again without direct experiencing plants subjectivity.

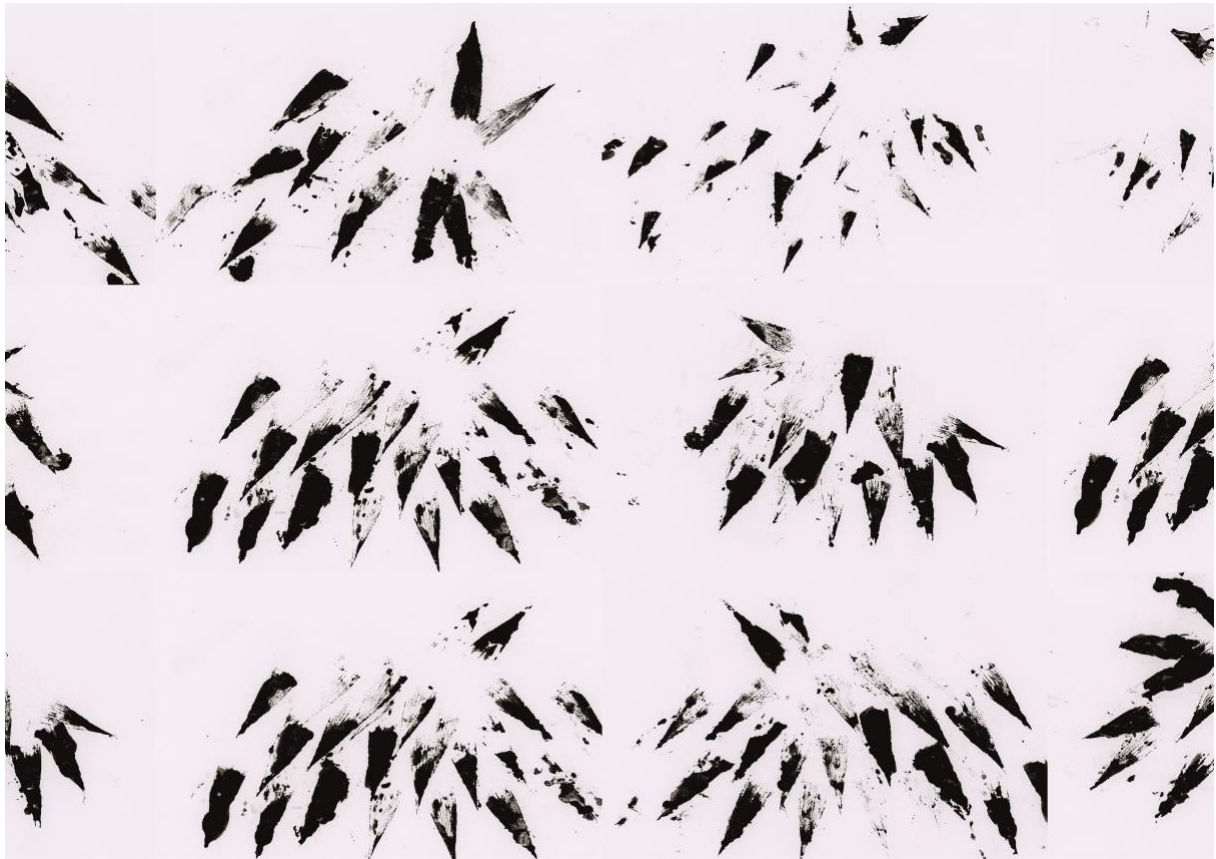


Figure 3. *disordered frames outcome 2*

6. Conclusion

Animation refers to the transformation of materiality, which is driven by endowing material labour into a film apparatus. It consequently generates the dualism of intention and craft, and automatically antagonises each other, during animation making process. Using non-knowing as a practical tacit is able to reconcile the tension between intention and craft, and evoke creativity beyond categories of technique throughout self-betrayed intention. It also redirects the definition of animation from an outcome to the process through its rejection towards potential timing excluding presence.

Animation's time structure, which is the shifting between visibility and its negation, constructs human recognition for plants. This physical animation bestows animators as a sharing identity for both human and plants. In this physical animation between humans and plants, the subject is the object. The authorship of plants presents as a permission for manipulating and being manipulated with timing throughout human as agency.

To animate plants with non-representation not knowing animated jam workshop, there emerges an alternative time mode differing from the linear which is fundamental in most animations. This time mode suggests a blurred structure that presents no clear order and sequence of each frame. The reason here might be ascribed to the failure of the animators to divide the covered space in real time. In this time mode, animation could be regarded as "form in disordered sequence" distinguishing from both "form in sequence" and "moving images".

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