Inspired by Karen Barad’s understanding of diffraction as a methodology and her juxtaposing of reflection and diffraction (Barad 2007: 89--90) as well as her experiments in moving across time and space with diffraction (Barad 2014) in this text I will explore diffraction as a method for performance. On the one hand I will understand diffraction as reading images and texts through one another to produce unexpected outcomes (Geerts and van der Tuin 2016) and on the other hand I will link diffraction to the tradition of artistic cut-ups (Burroughs and Gysin 1978). I will be intertwining the experience of looking at performance documentation with the proposals by philosopher Emanuele Coccia (2019) to consider performing with plants. These analyses will include extracts from my own work undertaken in 2017 and 2018. These videos of me sitting with shrubs and other plants will be read through Coccia’s ideas on vegetation to see whether these ‘waves’ of artistic practice and philosophical discourse might interfere with each other in a way that resonates with Barad’s understanding of diffraction as a methodology. Can looking at the kind of working with repetition and variation used in these performances for camera as a form of diffraction, as a process of entangled differentiation, better describe what is actually happening in them? Can the idea of ‘mixture’ proposed by Coccia resonate with the process of differentiation and entanglement involved in Barad’s use of diffraction?

By way of definition, in classical physics diffraction refers to the superposition or interference of waves (Barad 2007: 78--9), while in quantum physics diffraction is ‘at the heart of the “wave versus particle” debates about the nature of light and matter’ (72--3). In ‘[d]iffractionally reading the insights of feminist and queer theory and science studies approaches through one another’ (Barad 2003: 803) Barad has emphasized how
‘[d]iffraction is not a set pattern, but rather an iterative (re)configuring of patterns of differentiating-entangling’ (Barad 2014: 168).

The performances that I use as examples -- sitting with shrubs in Jandia on Fuerteventura in 2017 and sitting with the Tabaiba and the Cardón plants on Gran Canaria in 2018 -- were made as part of the artistic research project Performing with Plants at Stockholm University of the Arts (Arlander 2016a). They were made as reactions to various circumstances during my travels, outside the main work of creating year-long time-lapse videos in Stockholm, as surplus experiments of a kind. What can these ‘ripples’ produced in various tourist resorts tell us about performing with plants, and, vice versa, what can the use of these works as material for a diffractive reading of our relationship to plants tell us about diffraction as a tool?

**Diffraction**

In her groundbreaking text from 2003 Karen Barad was ‘[m]oving away from the representationalist trap of geometrical optics’ and shifting ‘the focus to physical optics, to questions of diffraction rather than reflection’ (Barad 2003: 803). In this context she was juxtaposing ideas from queer theory and science and technology studies in a diffractive manner although she describes her interest in diffraction also in general terms: ‘What often appears as separate entities (and separate sets of concerns) with sharp edges does not actually entail a relation of absolute exteriority at all.’ Rather, ‘[l]ike the diffraction patterns illuminating the indefinite nature of boundaries -- displaying shadows in “light” regions and bright spots in “dark” regions’ we are often dealing with ‘a relation of “exteriority within”’ (803). She observes how ‘[t]his is not a static relationality but a doing -- the enactment of boundaries -- that always entails constitutive exclusions and therefore requisite questions of accountability’ (803). When thinking of performance, and especially performance as research, this key idea of the indefinite nature of boundaries is of utmost relevance; what are the boundaries we create when making, describing and analysing our performances; what is included and excluded in each instance?
As mentioned above, in classical physics diffraction is understood as interference while in quantum physics diffraction is ‘at the heart of the “wave versus particle” debates’ (Barad 72–3). According to Barad, following Bohr, ‘there aren’t little things wandering aimlessly in the void that possess the complete set of properties that Newtonian physics assumes (e.g., position and momentum); on the contrary, ‘given a particular measuring apparatus, certain properties become determinate, while others are specifically excluded’ (Barad 2007: 19), not by the will or desire of the experimenter, ‘but rather by the specificity of the experimental apparatus’ (19). Diffraction experiments show how ‘wave and particle are not inherent attributes of objects, but rather the atoms perform wave or particle in their intra-action with the apparatus’ (Barad 2014: 180). If diffraction does not mean interweaving previously existing entities, as one might be tempted to assume, but rather producing or performing them through our practices, we should ask what are the apparatuses or methods we use and are used by, and how do they work in each instance?

In a text devoted to diffraction (2014) Barad broadens her use of the notion further in temporal terms: ‘Diffraction is not a set pattern, but rather an iterative (re)configuring of patterns of differentiating-entangling. As such, there is no moving beyond, no leaving the “old” behind. There is no absolute boundary between here-now and there-then’ (168). This is familiar in performance studies, where reinterpretations, recreations and more or less conscious repetitions are the norm, where the ‘now’ of a performance event is always echoing and implicated in other related ‘nows’, past and present. Barad further clarifies how ‘[d]iffraction is not a singular event that happens in space and time; rather, it is a dynamism that is integral to spacetimemattering’ (169). She writes: ‘Each moment is an infinite multiplicity’ and therefore ‘an infinitely rich condensed node in a changing field diffracted across spacetime in its ongoing iterative repatterning’ (169). The idea of moments as condensed nodes in a diffracted field becomes evident when looking back at a series of performances that I will describe in the following account, where each performance for camera consists of one singular moment recorded in real time. The repeated gesture of a pose with another plant partner in another place in another moment, both similar and different, makes each performance -- which in itself is ‘thin’,
uneventful or even ‘diluted’ compared to the often excessively sped up and intensified
time of stage performances -- into a 'condensed node in a diffracted field'.

Following the many recent uses of diffraction, thinking diffractively could mean a self-
accountable, critical and responsible engagement with the world, while reading
diffractively could mean reading texts ‘through one another’ to produce unexpected
outcomes, and serve as ‘a boundary-crossing, trans/disciplinary methodology’ that is
‘blurring the boundaries between different disciplines and theories to provoke new
thoughts’ (Geerts and van der Tuin 2016). Diffraction apparatuses for educational
purposes have served as tools for ‘creating reality, not reflecting it’ (Sauzet 2015: 39),
while in the context of art the ‘ripples that appear when stones are dropped into a pond,
where dynamic and overlapping ripples change one another’s form’ emphasize that
‘diffractive patterns are always in movement’ (Pritchard and Prophet 2015). I have
experimented with ‘diffractive writing’ (Arlander 2019) and ‘self-diffraction’ (Arlander
2020) as methods when (paradoxically) reflecting upon previous work. Here I will try to
explore diffraction as an artistic tool.

**Artistic cut-ups**

The literary cut-up technique invented by Brion Gysin and explored by William
Burroughs (Burroughs and Gysin 1978) is another way of reading texts through one
another. And there are predecessors, like Dadaist Tristan Tzara, who created a poem by
cutting a newspaper article into pieces, placing the pieces in a hat, taking out one at a
time at random and then writing down the words in the order they appeared. This way of
rigorously following chance operations, in order to bypass taste and authorial
preferences, could be compared with Hans Arp’s strategy to throw coloured papers on
the floor and then choose and even slightly rearrange them into a composition. The
specific cut-up method presented by Gysin ‘brings to writers the collage, which has been
used by painters for fifty years. And used by the moving and still camera’ (Gysin in
Burroughs and Gysin 1978: 29). Gysin proposes ‘to apply the painters’ techniques to
writing; things as simple and immediate as collage or montage’ (34):
Here is one way to do it. Take a page. Like this page. Now cut down the middle and across the middle. You have four sections: 1 2 3 4 . . . one two three four. Now rearrange the sections placing section four with section one and section two with section three. And you have a new page. (29--30)

According to Gysin: ‘Cut-ups are for everyone. Anybody can make cut-ups.’ Moreover, the method ‘is experimental in the sense of being something to do. Right here write now. Not something to talk and argue about’ (29--30). In ‘Cut-ups self-explained’ he describes a slightly different variation and adds: ‘use any system which suggests itself to you’ /--/ ‘You’ll soon see that words don’t belong to anyone. Words have a vitality of their own and you or anybody can make them gush into action’ (34).

William Burroughs developed the cut-up into something he called a fold-in method:

In writing my last two novels … I have used an extension of the cut-up method I call ‘the fold-in method’ -- A page of text -- my own or someone else’s -- is folded down the middle and placed on another page -- The composite text is then read across half one text and half the other -- The fold-in method extends to writing the flashback used in films, enabling the writer to move backward and forward on his time track. (Burroughs in Burroughs and Gysin 1978: 95--6)

He reminds us that this is normal in music, ‘where we are continually moved backward and forward on the time track by repetition and rearrangements of musical themes’ (95--6).

In contrast to diffractive readings these methods seem quite regulated and machinic, relying on cuts and combinations rather than interference of waves, or blurring of boundaries. For example, the shadow experiments that Barad describes show ‘diffraction fringes -- bands of light inside the edge of the shadow’ and demonstrate how
'[t]here is no sharp boundary separating the light from the darkness’ (Barad 2014: 170). Moreover, as '[t]he two-slit diffraction experiment queers the binary light/darkness story', in a more general sense ‘[d]iffraction queers binaries and calls out for a rethinking of the notions of identity and difference’ (171). Barad’s seminal text on diffraction, however, indicates already in its title -- 'Diffracting diffraction: Cutting together-apart' -- that cuts and diffraction patterns are interlinked. ‘Difference isn’t given. It isn’t fixed’, she writes. ‘Subject and object, wave and particle, position and momentum do not exist outside of specific intra-actions that enact cuts that make separations -- not absolute separations, but only contingent separations -- within phenomena’ (Barad 2014: 175). Elsewhere she explains the nature of such agential cuts as follows: ‘Intra-actions enact agential cuts, which are a cutting together-apart (that is, entangling-differentiating), as one move (not sequential acts)’ (Barad 2012: 80). Although this seems paradoxical, ‘it goes to the very nature of the agential cut, which cross-cuts itself’ (80).[[note]]3

Thus, although it could be interesting to apply a fold-in technique to combine some of the writings by Barad, referenced above, and by Coccia, referenced below, I am not exploring that possibility here, nor propagating a return to a rigorous cut-up or fold-in technique. Instead, I want to acknowledge those techniques as examples of the rich legacy of experimental methods within arts, and also suggest that they have some commonalities with diffractive methods.

**The metaphysics of mixture**

In his extraordinary study *The Life of Plants: A metaphysics of mixture* (2017, in English 2019) Emanuele Coccia creates a philosophy based on his knowledge of botany -- in itself a diffractive accomplishment of sorts. In the following I will reference some aspects of his fascinating proposal, namely, those that are pertinent to the practice of performing with plants and to the question of diffraction as a method, paying particular attention to his ideas on the relationship between plants and place, subject and environment, container and contained.
In relationships to site, which are central when working with vegetation, Coccia observes how ‘[o]ne cannot separate the plant -- neither physically nor metaphysically -- from the world that accommodates it’, and thus ‘[t]o interrogate plants means to understand what it means to be in the world’ (2019: 5). Importantly, he also stresses that ‘[p]lants, in their history and evolution, demonstrate that living beings produce the space in which they live rather than being forced to adapt to it’, and ‘have modified the metaphysical structure of the world for good’ (10). We like to think that humans have transformed the planet, but actually plants did it first. They have enabled a ‘world of which they are both part and content’ and ‘demonstrate that life is a rupture in the asymmetry between container and contained’. Coccia explicitly states: ‘When there is life, the container is located in the contained (and is thus contained by it); and vice versa’ (10). This might seem counter-intuitive, but becomes understandable with the example of breathing, which ‘means to be immersed in a medium that penetrates us with the same intensity as we penetrate it’ (11). According to Coccia, ‘[p]lants have transformed the world into the reality of breath’ (11). The idea that living beings create the world they inhabit, by default as it were, is relevant for all kinds of performances and artistic world-making, perhaps even more explicitly than for the relatively documentary examples I will discuss here, where the starting point is what already grows on site, in front of the camera. Breathing as a shared practice for humans and plants is nevertheless palpable.

Coccia’s description of the relationship of mutual containment seems related to Barad’s idea of entanglement, when he writes of the reversible relation between the container and the contained: ‘what is place becomes content, what is content becomes place. The medium becomes subject and the subject becomes medium’ (27). For him ‘climate … undoes the border between subject and environment’ and their oscillation brings him to the idea of mixture, which is not only composition but the ‘relationship of topological exchange’ (27). The term ‘mixture’ seems to presuppose pre-existing entities that are combined and mixed, contrary to Barad’s insistence that entities do not exist outside of the specific intra-actions that enact cuts and that make the separations between them. Coccia’s emphasis on the reversibility between place and content or between subject and medium, however, appears to go beyond the idea of mixture in an everyday sense.
Mixture for Coccia means fluidity: ‘The structure of universal circulation is fluid, the place where everything comes into contact with everything else and comes to mix with it without losing its form and its own substance’ (27). One could ask whether mixture can take place without losing form and substance, however. If we understand mixture in terms of breathing, what we inhale and exhale is a constant flux, shared and exchanged between animals and plants in an incessant flow. And with fluidity, of course, there are waves, interference and diffraction patterns.

Coccia understands the photosynthesis of plants as ‘a cosmic process of fluidification of the universe’, a process that keeps the world ‘in a state of dynamic tension’ (37). Calling such dynamism ‘fluidification’ seems counter-intuitive (plants are after all capturing solar energy), although understandable as a step towards the idea of immersion. For Coccia a plant ‘is a paradigm of immersion’ (53) because ‘[p]lants are the breath of all living beings, the world as breath’ while ‘[t]o breathe means to be plunged into a medium that penetrates us in the same way and with the same intensity as we penetrate it’ (53).

‘Immersion’ is another term Coccia uses for the relationship of container and contained, for the ‘mutual compenetration between subject and environment, body and space, life and medium’ (37). This means that ‘[s]ubject and environment act on each other and define themselves starting from this reciprocal action’ (37). Such mutual compenetration takes place on other levels than breathing, like digestion, and could be understood to concern everything we perceive and process. Or, in the words of Coccia, ‘to penetrate the surrounding environment is to be penetrated by it … in all space of immersion, to act and to be acted upon are formally indistinguishable’ (37). Not only how we perform but where and with whom we perform are constantly forming us. As an example, Coccia uses the experience of swimming and explains immersion as a ‘radical identity of being and doing’, stating explicitly: ‘One cannot exist in a fluid space without modifying, by this very fact, the reality and form of the environment that surrounds us’ (37--8). This proposal has practical relevance in terms of performance as well; our performances have consequences for their environment and ‘impact’, whether we intend it or not.
Simply by moving in the world, I am modifying the world. How am I modifying the shrub that I am posing with?

The constant and ongoing transformation of the environment is demonstrated by vegetation. ‘The existence of plants is, by itself, a global modification of the cosmic environment… It is already by existing that plants modify the world globally… “To be” means for them, to make world [faire monde]’ (38). This leads Coccia to ‘conclude that the existence of every living being is necessarily a cosmogonic act and that a world is always, simultaneously a condition of possibility and a product of the life it hosts’ (38). Or, in other words, ‘[e]very organism is the invention of a way of producing the world’ (38). This does not mean that we cohabit parallel worlds. Coccia rejects the idea of separate niches, because it is not possible to be in the world and ‘not to be exposed to the life of others’ (43). There are no separate life-worlds, because ‘[b]eing in the world means to exercise influence especially outside one’s own space, outside one’s own habitat, outside one’s own niche’ (43). According to Coccia: ‘the totality of the world one lives in … is and will always be infested by others’; it ‘is by definition the life of others: the ensemble of other living beings’ (43). In this sense, we are immersed in each other, dependent on each other, and we perform for and with each other whatever we do. Moreover, our performances can have unexpected consequences in areas unknown to us.

According to Coccia ‘[t]o recognize that the world is a space of immersion means … that there are no real or stable frontiers’ (43). This point resembles Barad’s idea of ‘differencing: differences-in-the-(re)making’, differences as ‘formed through intra-activity, in the making of “this” and “that” within the phenomenon that is constituted in their inseparability (entanglement)’ (Barad 2014: 174). Immersion is exemplified in a palpable manner by breathing. There is no clear border between what is inside and what is outside of me; between what is me and what is not me. ‘The air we breathe is … the breath of other living beings. It is a byproduct of “the lives of others”’ (Coccia 2019: 47). Here our dependence on vegetation becomes evident again; ‘every day we feed off the gaseous excretions of plants. We could not live but off the life of others’ (47). Immersion
can thus be understood as a result of ‘the fact that life is always its own environment and that, because of this, it circulates from body to body, from subject to subject, from place to place’ (47). During the current global pandemic, we are constantly reminded of our ongoing exchanges with others and of the impossibility of escaping immersion.

Affirming ‘that everything is in everything (pan en panti) does not mean’ imagining ‘a single substrate’, Coccia points out. ‘The cosmos -- that is, nature -- is not the foundation of things, it is their mixture, their breathing, the movement that animates their interpenetration’ (70). The fact that ‘everything is in everything means that everything is immanent in everything’ (70). And such ‘radical and absolute interiority … nullifies any distinction between container and contained’ (70). The ‘fact of being contained in something coexists with the fact of containing this same thing. The container is also the content of what it contains’ (70). This makes sense in terms of air, or water, as well as the microbial worlds. For Coccia the life of plants is the clearest demonstration of the world as mixture, showing ‘that every being of the world … is in the world with the same intensity with which the world is in it’ (71). This emphasis on interpenetration goes beyond the usual affirmation of being ‘in’ the world.

Coccia’s ontology is founded on the idea that ‘all action is interaction, or rather interpenetration and reciprocal influence’ (71). Although he uses the term ‘interaction’, which Barad in her agential realism has replaced with ‘intra-action’ (Barad 2007: 33), Coccia’s interpenetration and reciprocal influence sound closely related to ‘the mutual constitution of entangled agencies’ in intra-action, which ‘recognizes that distinct agencies do not precede, but rather emerge through, their intra-action’ (Barad 2007: 33). According to Coccia, ‘universal mixture’ means that ‘the world is constantly exposed to the transformation brought about by its components’. He adds, in passing, that ‘one need not wait for the Anthropocene to encounter this paradox: it was the plants that, millions of years ago, transformed the world by producing the conditions of possibility of animal life’ (Coccia 2019:71). Although the cyanobacteria probably should have credit for that, Coccia rightly criticizes the use of the term ‘Anthropocene’ because it ‘transforms what defines the very existence of the world into a single action,
historical and negative’ as well as ‘makes nature a cultural exception and makes the human being an extranatural cause’ (72). Coccia does not discuss, however, how to deal with the global destruction we are causing. Following his line of thought we can in any case abandon the idea of a pristine wilderness, because humans, like plants, inevitably shape the world.

Like Barad Coccia rejects such simplified notions as ‘environment’ because ‘the living being is an environment for the world in the same way in which the remaining things of the world are the environment of the living individual’ (Coccia 2019: 72). In a poetical phrasing he exclaims: ‘To know the world is to breathe it, because breath is a production of the world’, and ‘every mind … makes the world’ because ‘each act of breath is not just the simple survival of the animal in us, but the form and consistency of the world of which we are the pulse’ (72). This sounds almost like a manifesto for performance as research as methodology; we make what we study as we study it and we study what we make as we make it. A note on differentiation could nevertheless be added, because ‘the world can never characterize itself in its entirety: it is only through different enactments of agential cuts, different differences, that it can come to know different aspects of “itself”’ (Barad 2007: chapter 4, p. 432, footnote 42). Moreover, as Barad observes, ‘[o]nly part of the world can be made intelligible to itself at a time, because the other part of the world has to be the part that it makes a difference to’ (432).

Coccia’s ideas and notions like immersion, mixture and mutual implication of container and contained have relevance for all kinds of performance practices, which often are concerned with various forms of world-making; they are especially pertinent for the practice of performing with plants. The mutual constitution of plants and place and the ongoing exchange of oxygen and carbon dioxide between animals and plants through breathing make performing with plants an exercise in immersion.

Examples
The performances I will use here as examples were reverberations of my year-long time-lapse works in Helsinki in 2017, and in Stockholm in 2018, part of the artistic research project Performing with Plants (Arlander 2016a). In the abstract of the research application I wrote:

Rethinking our relationship to the environment is a central task for artists today. Artistic research can contribute through its capacity to allow and to generate hybrid forms of thinking and acting. This project participates in the discussion by way of a) developing artistic practices and producing art works that can critically question existing conventions and habits in our relationship to the environment and b) by theoretically reflecting, based on practical exploration, what it means to collaborate with plants and especially trees. The importance of the project rests ultimately on the importance of the plants themselves -- they are producing the preconditions for oxygen-based life on the planet. (Arlander 2016b:1)

The small performances described here were part of the same project, although more like ‘scribbles’ in the margins, waves of interference emanating from the practice. The common characteristics repeated in them included posing immobile with my back to the camera together with a plant and wearing the same pale-pink woollen scarf as a costume of sorts, to create coherence and emphasize repetition with variation, which in itself could be seen as a mode of diffraction. When returning to the videos, attempting a description as material for a diffractive reading, I realized that a more interesting approach would be to try diffractive editing. Instead of ‘braiding’ descriptions of these works with Barad’s explanations of her notions of intra-action and entangled differentiation or Coccia’s descriptions of his ideas on immersion and mixture, I could try to intervene in the videos themselves, following the tradition of artistic cut-ups.

The performances for camera, which I call Sitting with Shrubs, took place on Friday 22 December 2017 on a tourist trip to the Jandia peninsula on Fuerteventura, one of the
Canary Islands. They were edited into three videos.

In a blog post the same day I wrote:

> While the group of elderly Spanish couples strolled on the Cofete beach or on the shore near the Puertito de La Cruz or Punta de Jandia, I could pose for the camera with some of the shrubs. Unfortunatly, I do not know the names of the spiky grey shrubs that I sat with, and that grow everywhere in the desert around here, nor of the succulent type of shrub that is also common. (Arlander 2017c)

I also mentioned that I edited all three attempts into short videos and thought only the first one from Cofete beach was interesting or acceptable. Today I would say almost the opposite; the splendid view of the hills does not help focusing on the shrubs, while the two other videos with the human being sitting literally in the dirt make more sense in terms of sitting with, together and next to shrubs. The efforts of the shrubs to create a liveable world for themselves in the desert was palpable when sitting among them, breathing the same hot, dry, salty air.

The other series of performances for camera with plants took place at the end of March and beginning of April 2018 on the hills near Puerto Rico on Gran Canaria. They are grouped according to the plants I posed with into With the Tabaiba 1--4, With the Cardon 1--4, and With the Balo 1--2. In a blog post I describe the starting point:

> On the last day of March, I followed a walking path on the slopes of the hills east of Puerto Rico on Gran Canaria in order to find some shrubs to sit with. And there were indeed plenty of them. At the bottom of the small valley, where the path crossed something that at some point might have been the bed of a brook, I could get off the path, both above and beneath it, and made some attempts at performing for camera (Arlander 2018c).
What I did not mention in the blog was the difficulty of identifying the plants and especially their local names. The recognizable cactus-like Cardóns were the easiest to identify:

The Cardóns are quite amazing when watched closely, parts of them really old and withered, and then some parts growing new shoots directly from their fleshy but spiky trunks. They are not really inviting, but more evoking respect … hard to make acquaintance with but with a strong character. (Arlander 2018c)

After immersing myself in the worlds of these plants, trying to record their entangled differentiation, and their mutual compenetration with the environment, I am left with a series of video works. Following the tradition of artistic cut-ups, the question is: What would a diffractive editing of these videos look like. Traditional cut-up strategies might result in split-screen work or dividing the visual space with masks and then combining the fragments following a system like the square used by Gysin. Instead of cutting the images, I decided to try a version of the fold-in strategy proposed by Burroughs. Rather than only juxtaposing images, like folded pages, I inserted them into one another, a strategy I have used in other contexts (for example Arlander 2018b). This time the ‘folding’ did not focus on time, but on the variations with the same plant species. Figures 1-4 are stills from the videos and they show some alternatives I tried out. Still images cannot convey the movement, however. Because the camera is on a tripod movement happens only within the images, and because I am sitting immobile, movement is subtle, for instance when the wind catches the scarf. The still images can demonstrate the idea of containment or immersion, though, and perhaps also hint at the kind of diffraction, of ‘entangling-differentiating’, or ‘cutting together-apart’, quite literally, that takes place when the images are repeated, juxtaposed and combined with and within each other and subtly moving on in their respective times.

[[figure1]]
[[figure2]]
Based on these experiments we could think of ‘diffractive reading-writing’ on three levels, starting from the idea that diffraction consists of cutting together-apart in iterative patterns of differentiating-entangling. The first diffractive level consists in the variations created on site in 2017 and 2018, each session being a reverberation and diffraction of the previous ones. A second diffractive level occurs in the editing, while inserting videos into another, cutting and juxtaposing images within one or another image in various orders. This can be exemplified by the two versions of combining Sitting with Shrubs or the two versions of With the Tabaiba, where one uses With the Tabaiba 3 as the ground, and the other uses With the Tabaiba 4. A third diffractive level occurs when interweaving or braiding the descriptions of these videos with Coccia’s ideas on mixture. This could be done more intricately than what I have done here, for instance by literally interweaving phrases of the respective texts as in a traditional cut-up, or in the manner done by Barad in ‘Diffracting diffraction’. Bringing these ideas and images together in this article, however, could already be seen as a diffractive gesture. It could also be interesting, on another level, to try a more detailed diffractive reading of Barad’s and Coccia’s ideas.

Perhaps these inserted images could better be understood as mixtures, as a form of immersion? Perhaps, double exposures, crossfades or semi-opaque layering would be techniques more compatible with those notions. In these examples the major moment of immersion, the real experience of mixture, takes place in the moment of sitting with the shrubs, of inhaling and exhaling together with the plants. The videos are diffraction patterns that follow -- or precede new moments of immersion and mixture…

**Notes**
3 For more on agential cuts and artistic research, see Arlander 2018a.
4 For more on intra-action and artistic research, see Arlander 2014.
5 See documentation for 2017 in Helsinki
   (https://www.researchcatalogue.net/view/316550/325189) and in Stockholm
   (https://www.researchcatalogue.net/view/316550/325188).
6 See documentation for Stockholm in 2018
   (https://www.researchcatalogue.net/view/316550/410491).
7 See Performing with plants project archive
   (https://www.researchcatalogue.net/view/316550/316551).
9 For diffractive reading or writing, see Arlander 2019.
10 See details https://www.researchcatalogue.net/profile/show-work?work=417923
12 See details https://www.researchcatalogue.net/profile/show-work?work=453793
13 See details https://www.researchcatalogue.net/profile/show-work?work=454012
14 See details https://www.researchcatalogue.net/profile/show-work?work=454015

References

Arlander, Annette (2014) ‘From interaction to intra-action in performing landscape’,
Artnodes 14: 26--34, https://raco.cat/index.php/Artnodes/article/view/303312
Arlander, Annette (2016a) Performing with plants project archive
https://www.researchcatalogue.net/view/316550/316551
Arlander, Annette (2016b) ‘Performing with Plants’, research
proposal, pp. 1–6,
Arlander, Annette (2017a) ‘Documentation of performances
for camera in Helsinki 2017’, https://www.researchcatalogue.net/view/316550/325189
Arlander, Annette (2017b) Sitting with Shrubs, video
performances, https://www.researchcatalogue.net/profile/show-work?work=417923

Arlander, Annette (2017c) ‘Sitting with Shrubs on Jandia
Peninsula’, blog, https://annettearlander.com/2017/12/22/sitting-with-shrubs-on-jandia-
peninsula/
Arlander, Annette (2018a) ‘Agential cuts and performance as research’, in Annette Arlander, Bruce Barton, Melanie Dreyer-Lude and Ben Spatz (eds) Performance as Research: Knowledge, methods, impact, London and New York: Routledge, pp. 133--51.
Arlander, Annette (2018b) ‘The shore revisited’, Journal of Embodied Research 1(1): 4(30:34), http://doi.org/10.16995/jer.8
Arlander, Annette (2018c) ‘Spending Time with the Tabaiba – And with the Cardón’ Blog, 1 April, https://annettearlander.com/2018/04/01/spending-time-with-the-tabaiba/
Arlander, Annette (2019) ‘Performing with trees and the tide -- a diffractive reading’, Research in Art Education 3: 14--46, https://www.researchinarteducation.com/32019-september-issue
Arlander, Annette (2020) ‘Revisiting the Rock -- self-diffraction as a strategy’ [video essay], Global Performance Studies 3(2), https://gps.psi-web.org/issue-3-2/
Barad, Karen (2003) 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter' Signs: Journal of Women in Culture and Society, vol. 28. no 3., 801-831.
Barad, Karen (2007) Meeting the Universe Halfway: Quantum physics and the entanglement of matter and meaning, Durham, NC: Duke University Press.
Barad, Karen (2012) ‘Intra-actions’ [interview of Karen Barad by Adam Kleinmann], Mousse 34: 76--81, www.academia.edu/1857617/_Intra-actions_interview_of_Karen_Brad_by_Adam_Kleinmann_
Barad, Karen (2014) ‘Diffracting diffraction: Cutting together-apart’, Parallax 20(3): 168--87.
Burroughs, William. S. and Gysin, Brion (1978) The Third Mind, New York: Viking Press.
Coccia, Emanuele (2019) The Life of Plants: A metaphysics of mixture, trans. Dylan J. Montanari, Cambridge: Polity Press.
Geerts, E. and van der Tuin, Iris (2016) ‘Diffraction and reading diffractively’, New Materialism: How matter comes to matter, Almanac of keywords on the website of COST action IS 1307 https://newmaterialism.eu/ [accessed 5.12.2020]
Pritchard, Helen and Prophet, Jane (2015) ‘Diffractive art practices: Computation and the messy entanglements between mainstream contemporary art, and new media art’, Artnodes 15, https://doi.org/10.7238/a.v0i15.2594
Sauzet, Sofie (2015) ‘Thinking through picturing’, in Peta Hinton and Pat Treusch (eds) Teaching with Feminist Materialism, Utrecht: ATGENDER, pp. 39--53.

Figures (reduced in the published version)

Sitting with the Shrubs test
Sitting with the Shrubs mix

Sitting with the Tabaiba mix A
Sitting with the Tabaiba mix B

Sitting with the Cardón mix
