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Co-Creating Commons with Earth Others: Decolonizing the Mastery of Nature¹

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We can as humans indeed recognize ourselves in nature, and not only as we do when it has been colonized. . . made into a mirror which reflects back only our own species' images and our own need. We can instead recognize in the myriad forms of nature other beings – earth others – whose needs, goals and purposes, like our own, be acknowledged and respected.

(Feminism and the Mastery of Nature. Val Plumwood, 1993)

“We” on our side, presume to be the ones who have accepted the hard truth that we are alone in a mute, blind, yet knowable world – one that is our task to appropriate... Science, when taken in the singular and with a big S, may indeed be described as a general conquest bent on translating everything that exists into objective, rational knowledge. . . what is called Science, or the idea of a hegemonic scientific rationality, can be understood as itself the product of a colonization process.

(Reclaiming Animism. Isabelle Stengers, 2012)

As Val Plumwood so lucidly argues in *Feminism and the Mastery of Nature*, the act of decolonizing is a minefield. Thus, let me proceed cautiously and start with some necessary preliminaries. As the two epigraphs make clear, the process of colonization that is to be focused upon here is an onto-epistemological one, specifically the modern

western one. This characterization of the dominant western onto-epistemology as colonizing might require some elucidation. Additionally, in order to imagine another manner of relating to the non-humans, to earth others, and thus imagine co-creating commons with humans and earth others, it will be necessary not only to avoid both the Scylla of “reversal” and the Charybdis of “integration”, but also steer a course through a particular post-modern critique of dualism itself.

Plumwood shows how the colonizing process inhabits a densely interlocking web of dualisms, what I have called elsewhere exclusive dichotomies, where one term is absolutely separated from the other term. Such dualisms have the logical form A/not A, thus displaying what Plumwood calls “radical exclusion” and “hyperseparation”. How the dualism of nature/culture has been understood in western thought may be prototypical of such dualisms, where culture is everything that nature is not, and nature is everything that culture is not. Such dualisms imply a colonizing process since one of the terms dominates, marginalizes, devalues and in some other ways negativizes the other term.

Plumwood gives us a long list of such interconnected, overlapping and mutually reinforcing dualisms such as culture/nature; male/female; mind/body; master/slave; reason/matter; rationality/animality; universal/particular; civilized/primitive; subject/object; self/other among others (Plumwood 43). To this list I would add that of noble savage/ignoble savage or primitive, important for what is to follow. In her chapter on Plato, Plumwood makes clear the deep historical roots of such a structure in Western thought. However, both Stengers (much inspired by the work of Starhawk I myself have been) and I have argued that the eradication in the 15th, 16th and 17th century of a non-dualistic western alternative – usually referred to as hylozoism by historians—associated with the witches and the occult philosophers, was necessary to the dominance of an exaggerated form of a modern western dualistic system (Apffel-Marglin 31). This may also be related to what Foucault has famously called, in *The Order of Things*, the pre- or early modern episteme of “the prose of the world”.

This eradication happened first on the home turf of Western Europe and while it was beginning to rage in Europe, was exported world-wide through conquest and colonization. As Stengers writes in *Reclaiming Animism*, “we are heirs of an operation of cultural and social eradication – the forerunner of what was committed

elsewhere in the name of civilization and reason.” We are also, as Stengers points out, under the edict to “never regress”. The fear of regression as well as the emotional and psychological wounds exacted by the diktat to clear-sightedly and courageously accept that we are alone in a mute and blind world makes openness to bridging this hyperseparation with earth others not so easy to come by. It is too quickly seen as naïveté, exoticism or romanticism. Furthermore, hyperseparation leads to an either/or mindset about these polarities. Is it nature or culture? Is it mind or body? Is it the primitive or the noble savage? Thus, any attempt to take seriously indigenous animist practices are too quickly and too easily accused of falling into the trap of the “noble savage”.

It is particularly this either/or mind set which has bedeviled many political anti-colonizing movements, feminist movements, civil rights movements as well as environmental movements. Too often the choices have been reduced to this either/or dualistic straight jacket. Do we liberate ourselves by reversing the values of the oppressor or do we militate for integration into the dominant group? In other words, the choices are overdetermined as ‘reversal’ or ‘integration’. One of the aspects of Val Plumwood’s work that makes it so compelling is her critique of a more recent alternative consciously set out to explode dualism itself. This is the post-modern critique in feminism most powerfully articulated by Judith Butler in *Gender Trouble*. Plumwood’s critique of the post-modern anti-dualist position is nuanced and complex but to my mind indispensable to guide us in crossing the minefield of the decolonizing process and absolutely necessary to overcome both the “primitive” as well as the “noble savage” traps along with their ecological versions.

THE SCYLLA OF REVERSAL

A prevalent form of ecological reversal is the position that sees any human intervention in “nature” as inherently problematic, calling the agricultural revolution a catastrophe. That is, the view that the hunter and gatherer way of life is the only safe way for humans to inhabit the earth and that agriculture has inevitably led to today’s global ecological crisis.² The dominant manner of living on the earth has ravaged it and we need to revert to the form in which humans simply walk through the earth, gathering and hunting only what they need and minimally disturbing “nature”.

I will attempt here to transpose Plumwood's remarks made about feminism to the context of ecology or what is often (mis)named environmentalism. The colonizing of nature that Stengers lays at the feet of Science or the onto-epistemology of Classical Science (Apffel-Marglin 55-63) has led to the industrial revolution and the western modern way of exploiting an insentient, inert and mechanical nature thought to be inexhaustible and able to absorb all the waste such an exploitation generates. The mainstream conservationist movements, especially in the US, amount to a reversal in their affirmation that only by excluding humans from nature can it be preserved. The creation of National Wilderness parks in the US in the second half of the 19th century is exemplary of such a response, one that has been exported worldwide. The critique of these wilderness preserves by William Cronon (69-90) and of the Wilderness Movement by Ramachandra Guha (110-141) have effectively shown that it is not humans per se that have ravaged nature but a certain type of human activity. As Cronon so eloquently put it, such a view may assuage anxiety over the destruction of the earth, but it also prevents us from engaging in an in-depth questioning of the logic of economic activities and critically examine our mode of life.

Ramachandra Guha points out that although the American Wilderness Movement is a direct revolt against an earlier American environmental one, Progressive Conservation, they both share the same dualism between nature and culture. Wilderness Thinking rejected such colonizing views as those expressed by John Wildshoe of the Bureau of Reclamation who stated that: "The destiny of man is to possess the whole earth and the destiny of the earth is to be subject to man". For the Wilderness Movement, unspoiled, wild nature needed protection from such colonizing sentiments and actions. Guha formulates his point as follows: "Progressive Conservation places society above ecology (Nature must follow the dictates of Man), in Wilderness Thinking ecology is placed over society (Man must follow the dictates of Nature). Peasant culture, by embedding ecology in society transcends both these perspectives" (134). Guha also points out that both movements rely on Classical Science and its experts and calls for the subordination of Science to "morality and politics [so that] we can pave the way for a more open and symmetrical dialogue between different environmental traditions" (134).

An argument like that of Wilderness Thinking has recently been advanced by James Scott in his 2012 Tanner lectures, namely that the

only viable manner for humans to responsibly inhabit the earth is the hunting and gathering way of life. Such a view places the beginning of the Fall with the agricultural revolution. This view is akin to the wilderness movement, in that it proposes the reverse of the dominant modern model. There are many problems with such a view. It is quite unrealistic, given the entrenched dominance of the industrial and post-industrial model, and furthermore, it does not question the structure of dualism itself. The fundamental dualism is the one that separates a material reality from a non-material reality where mind or consciousness or culture properly belongs. It is a variant of the nature/culture dualism. Stengers expresses this dualism as one between something “natural” and something “symbolic”: “. . . this sad term ‘natural’, which in fact means ‘no trespassing: available for scientific explanation only’, . . . unlike the ‘symbolic’ which covers everything else” (201). Marxism, in its uncritical embrace of Classical Science, has followed the same logic and separated “the material base” from “the superstructure”. Such a choice has led to the well-known extremes of ecological devastation in communist countries like the enormous intensification of coal mining in China with the extraordinary amount of pollution that it entails.

THE CHARYBDIS OF INTEGRATION

Integrating with the dominant paradigm when considering ecological issues is exemplified by what has come to be labeled “green economics”. Briefly, and at the risk of oversimplifying, green economics seeks to integrate into economics what used to be considered exterior to it and called externalities. These include the effects of economic activities on the non-human world. With green economics, a cost/benefit analysis is undertaken as to the balance between the positive “environmental services” given by the non-human world and the negative “environmental destruction” inflicted upon it and thus loss of environmental services. All these are now priced and can be calculated, quantified and evaluated. To this type of calculation one can include carbon trading, that is the paying by carbon dioxide emitting countries or enterprises to carbon sequestering countries to even out the global balance between positive and negative effects of economic activity. In other words, what used to exist outside of the sphere of economics and industrial activity is now brought inside of it, thus integrating into the dominant paradigm what used to be separated from it.

This path corresponds with the second wave of feminism from the late 1960s and early 1970s. As many critics of this liberal feminism have argued, especially non-white, non-middle-class feminists, this strategy would have women become like white, middle and upper-class men, leaving that construction untouched and unexamined. Decolonizing requires a more complex strategy than integration as Plumwood argues in *Feminism and the Mastery of Nature*, and Apffel-Marglin discusses in “Development or Biocultural Regeneration? Toward a Cosmocentric Economy”.

In his radical and profound critique of mainstream economics, the Harvard economist Stephen Marglin (45) makes visible four fundamental and implicit assumptions upon which the whole edifice of the discipline of economics rests and discusses them under the rubric of “Economics as Myth”. These four assumptions are: individualism; knowledge as algorithm; the nation state as the sole legitimate community; and unlimited wants. He makes clear that these assumptions taken together work to severely erode social cohesiveness, and in general connections between humans. However, even such a radical critic shares the mainstream presumption of the non-human world as an insentient, mechanical background to human action. Marglin’s critique remains thoroughly anthropocentric (Apffel-Marglin 2012<iss.nl/en>).

The path of green economics of integrating the non-human externalities into economic calculation by quantifying ‘environmental services’ does not question one of the most fundamental of the many dualisms of western modernity, namely the dualism between nature and culture. This is problematic in itself, but since that dualism is interconnected with a whole long list of other dualisms, the path of integration under the label of green economics will not enable us to transcend the dualism of nature/culture and its many related dualisms and thus not only address the erosion of social cohesiveness but the destruction wrought on the non-human world. Or as the black poet Audre Lorde pithily put it many years ago: “You cannot tear down the master’s house with the master’s tools.”

THE POST-MODERN CRITIQUE OF JUDITH BUTLER

Judith Butler attempts to dissolve or explode gender identity and the dualism of male/female by advocating for a performative transcending of the identity of ‘woman’ and ‘man’ through parody and other means. The advantages of such a strategy include, according to Butler:

“Proliferating gender configurations, destabilizing substantive identity, and depriving the naturalizing narratives of compulsory heterosexuality of their central protagonists: ‘man’ and ‘woman’” (146). However, the problem with exclusive dichotomies – what Plumwood calls simply dualisms – is not the existence of two poles and the setting up of limits to the self by the boundary of otherness. The dissolution of gender identity is not enough for transcending the dynamic of colonization. As Plumwood argues:

The dissolution of gender identity through destabilization and the definitive act of parody recommended by post-structuralists (Butler 1990:142) amounts to the formation of anti-identities which become further identities. But these identities are not independent. They are still defined essentially in relation to the objects of parody which originate in the problematic of colonization (Plumwood 63).

Following Elizabeth Spelman’s work, I would further argue that the identity of woman – or man – is always entangled with many other aspects of identity such as class, race, ethnicity, age, religious affiliation and more (Spelman). Exploding gender identity does not ensure that other aspects of identity are exploded along with gender. Just as dualisms are interconnected, so are the many aspects of identity and those include relation to place and to earth others. It is impossible to separate out one’s gender identity from all these other aspects of identity; they form a densely entangled knot. In a footnote, Plumwood makes what I consider to be an extremely important point. To the extent that gender identity of both man and woman includes commitment to others and responsibility for their needs, such as children, and I would add elders, relatives, animal companions, and other earth beings, “it cannot involve the high degree of choice, contingency, arbitrariness and instability which seems characteristic of a performative identity” (Plumwood 205). Social and place-based identities are at once limiting as well as empowering, enabling connections to human others and to earth others, enabling the co-creation with all these diverse others of stability and continuity by enacting commons. I have argued that in non-modern collectivities of both humans and earth others, continuity is an achievement attained through a carefully orchestrated communication and co-creation or co-making

not only between humans but between humans and earth others especially during what can be called rituals. I have chosen the word “ritual” because of its Sanskrit etymology of *ritu*, usually translated as “making order” (which I understand as continuity in time and place). I have argued that the outcome of such actions, when successful, enact a ‘common livable world’ between both humans and earth others. I would now call such “common livable worlds” simply “commons” (Apffel-Marglin 53-54).

Plumwood’s critique of Butler’s postmodern attempt to transcend gender dualism also makes visible that such a strategy involves a high degree of choice along with contingency, arbitrariness, and instability. Such choice by an individual exemplifies the centrality of individualism in the western modern episteme. As Marglin’s critique of economics shows, individualism is at the heart of the methodology of the discipline and he lays at its feet most of the blame for the erosion of connection among humans that has decimated human communities in “advanced” industrialized countries. An individualist strategy may destabilize gender identity, but it also comfortably fits in with an economic system that colonizes earth others and those humans seen as closer to those earth others.

Responsibility to earth others, especially animals, the land, plants and their needs requires stability and continuity and most of the time - except for animal companions such as pets - a minimum level of cooperation among humans. Many such actions require the concerted efforts of a group of humans and as we shall see below, in the case of the pre-Columbian Amazonian anthropogenic soil discovered by archaeologists, it required the mobilization of humans on a grand scale, as well as, of course, many earth others. In such situations, individualism, arbitrariness, contingency, and instability would make the co-creating and maintenance of this extraordinarily sustainable and ecological agricultural commons impossible.

RESPECT AS MORAL CONSIDERATION

Plumwood considers the ethical concept of respect toward earth others as central to decolonizing “nature”. However, a previous step that enables the attitude of respect toward earth others to emerge is that of giving intentionality to them. This is what Bruno Latour and others such as Donna Haraway and Karen Barad have called “agency”. The agency, or in Plumwood’s words, the intentionality

of earth others has been re-discovered rather recently in the west by critical science studies. In the pre-modern western episteme, the agency of earth others was taken for granted by most rural folks and many literate urban ones as well. This is made quite clear in one historical study of the 17th century debate between Franciscus Linus and Robert Boyle by Elizabeth Potter (39-43). There she points out that Linus' hylozoist views were dominant at the time and that for him gases, water and such earth others had their own intentionality or agency. She also shows how Linus' findings accounted just as well as Boyle's for the experimentally observed "matters of fact". Nevertheless, in a few short decades, Linus' views were relegated to an obscurantist past to which we modern should never regress, while Boyle's mechanist "corpuscular" views won the day. I have argued that the defeat of hylozoism – or of the episteme of the prose of the world – had everything to do with the emergence of the mercantilist proto-capitalist economic system after the collapse of the manorial system, with the widespread phenomenon throughout Europe of the enclosure of the commons (Apffel-Marglin 43-45). However, in much of the global south and the former colonized countries as well as for many indigenous people in industrialized countries the agency of earth others has never disappeared.

A striking example is given by Wendy Espeland in her book *The Struggle for Water* detailing a study of the Colorado river about the environmental impacts of constructing a dam on the reservation of the Yavapai indigenous people of Arizona. Those making the study used the methodology of cost-benefit analysis to come to a decision and part of the decision-making process involved interviewing members of the Yavapai reservation. The great majority of the Yavapai interviewed did not want the dam. At the end of their study the experts came to the decision that building the dam would be more costly than not building it. At the news that the dam was not going to be built, the Yavapai did not react with celebration, quite the contrary. They were angry and resentful with the experts for the way they had treated the land: coldly, rationally, without respect. This is what one of their elders told them: "God gave the Indians the land . . . for use. They don't really own the land. The Anglo with title says it's mine, no one else's. Land is part of nature. Humans are here temporarily. They live from the land where all life comes from. They are one. Without the Indian land can't be land, because it needs to be taken care of in order to survive life" (Espeland

201). In the same spirit, Plumwood makes a careful argument for not restricting agency and with it the ethical consideration of respect, to what are generally classified as “living” earth others such as animals and plants. She gives the example of the glaciated valley:

[T]he glaciated valley can easily be conceived as such an intentional system, if considered as part of a directional, developmental process of the earth, and we might both hinder its journey and stop it telling its story by damming it, for example. If the object of respect then, is the other . . . there is no need to draw a boundary concerning those who qualify for respect. [11] Footnote 11: . . . Drawing the moral boundary at living things has the problematic consequence that the wild river, the forbidding mountain and the venerable glaciated landscape on which the story of the earth’s history and power is inscribed, have value only for and in virtue of the living things they contain or entertain (Plumwood 138- 210).

Plumwood ends her commentary on respect as a moral consideration with the liveliness and vitality of being in relationship and dialogue with earth others. However, she reminds us that we cannot stereotype such relations as all love and harmony. There is no single manner of reciprocity or exchange between self and other either among humans or between humans and earth others but rather multiple and contextual ones. However, to have a glimpse of this vitality, let me quote the words of a shaman (*paq’o*) in the Peruvian altiplano: “For us, all of us who live in this *pacha* (time-place) we are beings: the stone, the earth, the plants, the water, the hail, the wind, the diseases, the sun, the moon, the stars, we are all family, we are all kin. To all live together we help each other reciprocally, mutually; we are in constant conversation...” (Terre des Hommes 10). It is such views, articulated by many in the Amazonian and Andean worlds, that has led the Peruvian NGO PRATEC – with whom I collaborated for ten years – to capture such attitudes with the following expression: “In the Andes and Amazonian regions, we nurture [earth others] and know how to let ourselves be nurtured by them in return” (Apffel-Marglin with PRATEC 52). Such reciprocal dynamic is one of interagency between humans and earth others. I translate the Spanish verb *criar*

by nurture. It is a term used both for raising children as well as for raising animals and crops, trees and plants in general, as well as water sources and more generally landscapes. For a recent and profound treatment of interagency among earth others let me turn to the work of the philosopher Vinciane Despret.

AGENCEMENTS AS PROCESSES OF ATTUNEMENTS

The translator of Deleuze and Guattari translated the French word *agencement* as assemblages. As Vinciane Despret, in an essay titled *From secret agents to interagency* has recently pointed out, this translation loses the kinship between *agencement* and *agence* (agency) (Despret 40). That is a serious loss since she argues that agency emerges from *agencements*. The French word *agencement* preserves the dynamic, action oriented, meaning of agency whereas ‘assemblages’ as a word evokes nonliving things thrown together by someone. Despret argues that agency does not reside either in individual humans neither in groups of them, nor in specific earth others. Despret discusses at length two examples, one of the peacock’s display described by Darwin and a type of orchid of the genus *Ophrys* and their pollinators discussed by Carla Hustak and Natasha Myers (35). Despret also discusses their human observers, the scientists and their written observations. Despret chose those two examples because in both cases it is difficult, even impossible to describe what is happening in terms of such things as “survival of the fittest” or “the selfish gene”. In the case of the peacock, Darwin himself writes that the peacock loves to display its beauty and does so even to birds of another species thus making an argument about reproduction less than convincing.

The case of the *Ophrys* is quite remarkable. There the flower exhales a pheromone that mimics the sex pheromone of the female pollinator bee thus attracting male pollinator bees who even display their genitals to the flower to mate with them. However, the *Ophrys* has no nectar to reward the pollinator. Previous scientists observing such doings used a language of fraud and deception to capture this unusual phenomenon. Hustak and Myers argue that such language stultifies both flower and insect agency and invokes a world of “blind, reactive, automatons” (Despret 32).

The *Ophrys* flowers clearly possess the ability to deceive, to attract, to play, and nevertheless, they are described by their scientific observers in mechanical terms. The language that dominates scientific

ecological observation of plants, insects and other animals is “rendered on a model of a militarized economy that structures life as a struggle in a war zone of competition, enemies, dupes and deceptive mimics” (Despret 34). Hustak and Myers advocate for a language in ecological science that captures the affective dimension of ecology, one shaped by “pleasure, play, and experimental propositions” (35). Such a language is deployed with exquisite grace, nuance, and depth by anthropologist Deborah Bird Rose in her work on love and extinction of the dingo in Australia (*Wild Dog Dreaming*).

Additionally, Hustak and Myers, as reported by Despret, show that Darwin’s own language of description are stories of “connivance, attractions, reciprocal inductions and also repulsions’ focusing on a ‘world rich in affects, full of beings able to affect and be affected by others, creatures involving themselves in one another’s lives” (30). Despret shows that in a later moment, Darwin and ecological scientists after him, censure their observations reverting to the objective, affectless language made *de rigueur* ever since Robert Boyle’s experimental method and his technologies for both observation and reporting on those (Shapin and Schaffer 22).

Hustak and Myers call the original language of ecological observation used by Darwin and others as an animated and even animate language which becomes de-animated in a later phase where affectless, rational, detached language is reverted to in order to fit in with the requirements of official ecological science or philosophy of science. As Despret puts it “Darwin himself became animated in an animating world”. Such animation on the part of Darwin or any scientific observer amounts to entering “into the game of reciprocal induction . . . It is to call for a response and to respond” (36). Hustak and Myers did not need to re-enchanted Darwin’s observations on the world of the Ophrys and their pollinators, they only needed to pay very close attention to the original language used.

From such work as that of Hustak and Myers, Despret argues that agency emerges from *agencements* involving plants, insects and their human observers. She rhetorically asks: Who touches when one touches? Who initiates? Who acts? Who calls to act? The flowers? The human observers? The insects?

. . . flowers gain agency, through becoming enabled to make their companion pollinators be moved by them, and

this is how the latter could themselves be agents, through becoming enabled to make the flowers able to attract them, and in turn to be moved by them. This is why agency always appears in a flow of forces. Agencies spring in a flow of forces, in *agencements* that make more agencies: the one who makes others do, the one who makes others move, the one who inspires others to be inspired, and the one who is therefore induced, mobilized, and moreover, put in motion, *activated* (Despret 40-41).

Thus, agency emerges from a flow of forces between earth beings who reciprocally make each other do things, attract, be attracted, etc. Despret insists that this is a plurivocal process in the sense that what constitutes the agent and the affected entity is a dynamic process that cannot be centered in any one being. As the biologist Richard Lewontin wrote, “organism and environment make each other”³. What Despret makes visible is that dividing this dynamic into two separable entities such as “organism” and “environment” is impossible and does violence to that dynamic process. The dynamic process of attunement of an *agencement* is never fixed once and for all. However, Lewontin’s pithy phrase startles one out of the dualism of organism and environment, even though it remains beholden to that language. The lack of fixity is also an indication that to make boundaries between earth beings or between *agencements* is always a partially arbitrary move. Or in a more prosaic way, how is one to determine what is organism and what is environment?

CO-CREATING WITH EARTH BEINGS: THE CASE OF AMAZONIAN DARK EARTH

The *agencements* that Despret discusses involve humans only as scientific observers. I would like to shift to the case of *agencements* that include humans as participants and not as observers. The humans in this case are not Western ones, not heirs to an extremely long Western tradition of human exceptionalism. Quite the contrary, Amerindians in general consider earth beings as kin, as the earlier quote from the Peruvian *paq’o* (shaman) from the Altiplano makes clear. The case I wish to focus on is the anthropogenic pre-Columbian Amazonian Dark Earth (ADE) discovered by archaeologists in the whole Amazon basin. In Brazil this soil is known as Terra Preta do Índio (Black earth of the Indians).

I have successfully re-generated this Amazonian pre-Columbian soil in my non-profit organization in the Peruvian High Amazon in collaboration with local indigenous Kichwa communities. One of the characteristics of this anthropogenic soil is that it is full of broken ceramics. It also contains a type of charcoal made with much reduced oxygen, called “biochar”, giving that soil its black color. The soil with its ceramics and biochar – among other ingredients – has been thoroughly studied by a variety of scientists, including soil scientists, whose publications have enabled me to re-generate it. According to Johannes Lehmann – who has studied those soils for years in Manaus (Brazil) and heads a laboratory at Cornell University studying this soil as well as biochar – the oldest strata of ADE date to 8500 years ago.⁴ The extraordinary feature of this soil is that it is still fertile today. Given the fact that due to the Spanish invasion in early 16th century, nine out of ten Amerindians died, the civilization that this soil made possible vanished in a few decades. The technology to make this soil was forgotten; hence its current fertility is even more remarkable since it has not been touched for some 500 years.

Fortunately, the first Europeans to navigate down the Amazon in 1541-2 under the command of the conquistador Francisco de Orellana, recorded in detail what they saw. The writings of Orellana’s friar, Gaspar de Carvajal, however, were rejected as total fabrications since when the next Europeans navigated down the Amazon a few decades later, all they saw was forest and a few small scattered settlements.⁵ However, recent archaeological excavations have confirmed what Carvajal described, namely large cities with houses strung along the rivers for miles, gleaming buildings including ceremonial complexes, grand causeways as wide and straight as modern ones. Archaeologists and other scientists all concur that such complex civilization could only arise due to this extremely fertile soil and the permanent agriculture it made possible.⁶

At the end of December 2013, I made a trip north of the department of San Martín and the town of Lamas where my center is located to visit the archaeological complex of Kuelap in the neighboring department of Amazonas. Kuelap is the center of the Chachapoyan pre-Columbian culture and exemplifies a complex civilization with a densely built citadel, ceremonial complex surrounded by terraced fields, retained by stone walls. There I was able to confirm what the director of excavations at Kuelap, Dr. Alfredo Narvaez, had told me a

year earlier, namely that he had found there the black soil I was regenerating in my center. This soil is still fertile today and in the words of a local farmer with whom I spoke, Victor Homero Tafur Bardales: “I know from my grandparents that all these soils on those terraces are extremely fertile. We farmers fight among ourselves for those patches of black soil. We do not know how our ancestors made this soil and would be so eager for re-creating it here in Kuelap.”

MASTERING THE ENVIRONMENT OR CO-CREATING WITH EARTH OTHERS?

In an excellent 2002 BBC documentary on the discovery of this pre-Columbian amazing Amazonian soil entitled *The Secret of El Dorado*, the venerable Betty Meggers who has worked in the Amazon for decades and authored an influential thesis in her book *Amazonia: Man and Culture in a Counterfeit Paradise*, refuses to recognize the evidence amassed by many archaeologists. Her thesis states that due to the poverty of Amazonian soils and of its peculiar forest environment, this puts absolute limits on humans’ ability to develop a more complex system than the one made possible by slash and burn agriculture, namely of small semi-permanent settlements and a low population density. She tells the interviewer that North Americans have tried in many different ways to develop the Amazon but all these efforts with advanced technology have failed and how could indigenous people with none of this technological know-how have done any better? Here the colonizing attitude of the superiority of North American technology over that of indigenous knowledge is stated plainly. The dualism between environment and humans remains in full force and with it a colonizing attitude. The documentary goes on to show all the evidence found by several archaeologists in different sites in the Amazon basin that reveals the existence of large cities and ceremonial complexes made possible by ADE. The voice over commentator states that the pre-Columbian inhabitants were able to “master their environment” betraying the documentary’s makers’ adherence to a colonizing language.

A NON-COLONIZING NARRATIVE

Drawing on the foregoing, I intend to argue that Vinciane Despret’s understanding of *agencement* enables me to provide a way around all the pitfalls of decolonizing listed earlier and offer a non-colonizing narrative. *Agencements* for Despret (40) is a co-animation where earth

others reciprocally affect each other, “inspiring, provoking, producing, inducing, arousing, sparking, evoking, instigating, engaging, inspiring and so on” and reciprocally and reactively:

Affect is understood in terms of the capacity to be incited, inspired, engaged, or provoked or in being induced to produce – or even in terms of the power to give another being the power to affect you: what Latour has designed as the ‘faire faire,’ meaning in French ‘to make one do’ and ‘causing to be done’ (Despret 40).

When including Amerindian humans in these *agencements* it is crucial to keep in mind that these humans do not share the western episteme of human exceptionalism. As the quotes cited earlier show, the act of being affected by earth others and reciprocally affecting those seem self-evident to the Kichwas. Below I will try to illustrate this by using the example of the ceramics found in ADE, or more precisely what I learned about those ceramic fragments from an indigenous collaborator.

Archaeologists surmise that the ceramic fragments come mostly from middens and a few from sepultures (Neves et al. 29-50; Myers et al. 15-28). The specific provenance of broken ceramics, nevertheless, was revealed by the Kichwa young man who used to work on this project at my center, Girvan Tuanama Fasabi. What Girvan Tuanama told me is that his grandmother always offered a piece of broken ceramics to the earth in her food garden, called locally a *chacra*. He called such an act a *pago* (literally a payment) and at times also called it an offering (*ofrenda*) to Mama Allpa, the spirit (*ánima*) of the soil. The practice of breaking vessels used for offerings is well known in both the Andes and the Amazon regions (personal communication from Prof. Thomas Cummins of Harvard, December 2012).

When Girvan teaches US undergraduates doing internships at my center in Lamas, he constantly speaks of the necessity to show respect (*respeto*) not only to the plants but to all the other earth beings recognized and named as spirits by the Kichwa such as Mama Allpa (earth/soil), Yaku Mama (water/rain), Mama Killa (moon), Sachamama (forest), Tayta Inti (sun) among others along with specific plants such as medicinal plants, master plants (psychotropics) or specific trees or animals, or sources of water. Making a libation of the traditional pre-Columbian corn beer (*chicha*) held in a ceramic vessel is done

especially before planting and after harvest by sprinkling *chicha* on the soil and then drinking the rest oneself. While doing this Girvan typically declares that as the earth/soil drinks, he reciprocally shares this action with the soil by drinking too as one does among human kin. Then the ceramic vessel is shattered, and the pieces scattered in the field. As the earth nourishes the humans, the humans reciprocally nourish and respect the earth, sustainer of life. This example of offering pieces of ceramics to the spirits of the *chacra* seems a clear illustration of Plumwood's view that showing respect is an act of moral consideration, one that is central to decolonizing nature.

It does not seem fortuitous that the publications on the findings about ADE have not considered the possibility that the abundance of broken ceramics everywhere ADE has been found might originate from offerings. The language of "the mastery of nature" in its colonizing ethos renders invisible the dynamic that Plumwood, Stengers, Hustak & Myers, Despret, as well as myself are at pains to make visible. It also renders rather irrelevant the issue of offerings on the part of humans to earth others. The diktat to "never regress" – discussed earlier – along with the excitement of discovering a soil that is touted to be able to solve the climate crisis, as well as solve the hunger crisis in the global South, militates against focusing on such reciprocal actions between humans and earth others. The publications on ADE are dominated by the de-animated and de-animating objectivist scientific language discussed by Huskat & Myers as well as Despret.

I would argue that Amerindian humans are part of the dynamic so vividly evoked by Despret in which earth others affect each other reciprocally. When humans are one of the participants in such *agencements* the results are co-creation between them and earth others. The Amazonian Dark Earth of extraordinary millenarian fertility, high productivity and additionally power to sequester greenhouse gases⁷ that has the international ecological and agricultural communities abuzz with excitement, does not represent the pre-Columbian Amerindians' capacity to "master their environment" (*pace* the 2002 BBC documentary commentator) but rather the co-creation between them and some earth others of this extraordinary soil. Such co-creation implies respect on the part of the humans toward the earth others as well as all the reciprocal flows enumerated by Despret. It is impossible to participate in this dance of reciprocal induction within a colonizing dualistic framework.

HUMAN PARTICIPANTS IN *AGENCEMENTS* AND THE ISSUE OF CONTINUITY AND STABILITY

As my discussion of Plumwood's critique of Butler's postmodernist attempt to explode gender dualism makes clear, the human act of nurturing children, among other humans, as well as nurturing crops, animals, trees, landscapes, springs, etc., requires stability and continuity. Children take a long time to become independent; crops and other plants take their time to grow; animals need constant care; etc. Humans project into the future the desire and possibility of bringing to fruition such reciprocal care and nurturance. What is remarkable about the Amerindians of the Andean and Amazonian regions (and possibly of all the Americas) is that such nurturance is experienced and spoken about as a reciprocal one. This reciprocity of nurture or to use Despret's term of induction, is what makes this dynamic escape the colonizing narrative of "the mastery of nature" (and I should add, the mastery of other human beings). In caring for or inducting earth others, the humans let themselves be affected, be touched, even be transformed. This is the aspect that makes this relationship a horizontal one rather than a hierarchical one, where one side is not rendered mute and passive, where one side is not the only one being acted upon with no power to in turn act upon the one(s) acting upon it.

The making of commons requires such reciprocal acts where humans and earth beings induct, affect, move, and inspire each other. Nevertheless, the need for creating continuity and stability as well as humans' manner of imagining and naming earth others leads to acts that can be remembered and thus repeated. I would argue that the naming of certain earth others such as the soil, the forest, the water, the moon etc. and calling them *ánima* (spirit) arises from this need for continuity and stability. They are related to one another as kin and as kin are addressed by appropriate terms. The word *mama* and the word *tayta*, are in fact kin terms meaning "mother" and "father". The Spanish word *ánima*, spirit or soul, translates a Kichwa term *supay* which the Spaniards rendered as "devil". Thus, humans stabilize *agencements* in efforts to achieve continuity and stability by such naming and by appropriate and respectful repeated actions toward the earth others thus named.

As Plumwood herself recognizes, such delimitations between human selves and earth others – as in the case of limits between human selves – constitute both a source of power and a source of

limits put on one's freedom of action. The limits are necessary for continuity and stability but of course can always become sclerotic and counterproductive. However, the reciprocal nature of the act of care or nurturance may be a source of feedback for the humans. Should the humans no longer be nurtured by their crops, i.e. the crops fail repeatedly, by the reciprocity of the actions, the humans in reciprocity are more likely to adjust, correct or change their actions in an attempt to elicit the desired reciprocity on the part of the earth others.

In the case of the Amazonian Dark Earth, the astounding continued fertility of such soils attests to the efficacy of the humans' reciprocal actions with relevant earth others. The only reciprocal acts we are certain about is that of giving ceramic shards to the earth since the Kichwa practice of doing this is evidence of continuity with the pre-Columbian past. Scholars are not certain how biochar was made nor how micro-organisms developed in those soils. Scientists studying the effect of such ceramic shards in these soils have found that they increase fertility through a positive exchange of oppositely charged ions between the roots of the crops and the ceramic shards (Vandermeer and Perfecto 35-36). Such information is of course useful, welcome and true within a certain paradigm, but nevertheless it renders invisible the agency arising from human-earth others *agencements*. Such detached observations make difficult the making of commons where both humans and earth others reciprocally induct each-other in a non-colonizing respectful fashion.

At Sachamama Center for Biocultural Regeneration, we gather micro-organisms from the floor of the rain forest in a way I was taught by a group of organic farmers in the town of Sarcero in Costa Rica. Those farmers were not indigenous and did not engage in any reciprocal action with earth beings. They taught me how to gather the micro-organisms from the floor of the forest, how to ferment them both aerobically and anaerobically and add them to the soil. The patch of forest in which we gather micro-organisms at my center in Lamas is part of one of the native communities we collaborate with. So before entering the forest and gathering the micro-organisms we engage in a reciprocal act of giving a special type of organic tobacco used by *curandero(a)s* (shamans) in the region to the forest, called by the Kichwa Sachamama. We ask her permission and we thank her for her gifts, following the lead of our Kichwa friends.⁸ Micro-organisms have been found in all the pre-Columbian sites where this Amazonian

Dark Earth has been found. However, in the case of micro-organisms, there is no continuous tradition on the part of the Kichwas of gathering them and thus we have no way of knowing whether the reciprocity we engage in was performed by the pre-Columbian co-creators of this soil. Nevertheless, our Kichwa collaborators spontaneously and effortlessly offered tobacco to Sachamama before gathering the micro-organisms. It seemed an obvious and normal thing to do for them. The same lack of certainty exists among scholars about the pre-Columbian making of biochar. Scholars do not agree on how biochar was made in pre-Columbian times.

CONCLUSION

The Kichwas use the Spanish term *ánima*, usually translated in English as “spirit” to refer to many earth others. Their own term was rendered by the colonists as “devil” and the Spanish tried to eradicate such practices and labelled them as dangerous diabolic witchcraft. They enacted the infamous laws of Extirpation of Idolatry to eradicate indigenous practices as similar ones were being eradicated in Western Europe when the Spaniards arrived in 1532 in what is now Peru.

The word “spirit” can easily lead one to use the term “spiritual” for such practices. The problem with such a term pointed out by many, is that in the Western tradition “spiritual” refers typically to a transcendental realm where the divinity, angels and other such entities reside. Such beings are referred to as “supernatural beings”. The *ánimas* of the Kichwa could not be further removed from such “supernaturals”. They are earth others, kin with humans and part of multiple *agencements*, very much part of this earth. Nevertheless, several philosophers of science such as Bruno Latour, Isabelle Stengers, Vinciane Despret, Graham Harvey and Deborah Bird Rose are reclaiming the term “animism”. Unlike an earlier anthropology that saw animism as a “belief” in “supernatural” entities however, such animism becomes in the process of being reclaimed something quite different. As Despret formulates it: “There is, in each *agencement*, *co-animation*, in the literal sense of the term, that is, in the most animist meaning of the term” (Despret 42). Here the term “animist” is related to “animating” and crucially to the reciprocal actions of “co-animating” in *agencements*. It is through such reciprocal co-animation that we can decolonize the master’s story of nature (as well as of society) and thus be able to create true commons. On the part of humans such

reciprocal actions with earth others are always spoken of as imbued with respect. Humans showing respect toward earth others constitutes an ethical consideration; without respect there is no possibility of decolonizing the master's story of nature and/or society, and of co-creating commons with earth others and each other. I would suggest that commons are *agencements* that include human participants and those latter have stabilized those *agencements* to create livable common worlds for both earth others as well as humans.

Notes

1. I wish to thank all the members of the College of the Environment Think Tank at Wesleyan University in 2014: Deborah Bird-Rose, Lauren Burke, Paul Erickson, Gillian Goslinga, Josh Krugmann, Manon Lefevre, Hellen Poulos, and Nicole Stanton for an extremely stimulating seminar and for prodding me to go where I was reluctant to go. I also want to give a very special thanks to the Belgian artist/philosopher/activist/farmer Kobe Matthis for sending me articles by Stengers and Despret and for most rewarding conversations on these topics during his brief visit at Sachamama Center for Biocultural Regeneration in December 2013.

2. This position has been forcefully defended by one of my favorite scholars, James C. Scott in his Tanner lectures. Although I disagree with him in his views expressed there, his other books have deeply influenced me. He sent his Tanner lectures to me via email in April do 2012 in manuscript form.

3. Statement made at a public presentation at Hampshire College, September 21,1993.

4. See Lehmann's website: <http://www.css.cornell.edu/faculty/lehmann/> consulted on 04/07/2020.

5. For a slightly novelistic version of Carvajal's report see chapter 1 by Robert Tindall in *Sacred Soil: Biochar and the Regeneration of the earth*, with F. Apffel-Marglin & David Shearer. The four core chapters by me are about our work regenerating this soil in my center in the Peruvian Upper Amazon. A Spanish translation has been published in 2019 under the title of *Yana Allpa: Biocarbón; Una solución amazónica a la crisis climática*.

6. For an excellent and readable account of this soil see chapter 9 in Charles Mann *1491: New Revelations of the Americas Before Columbus*.

7. See www.css.cornell.edu/faculty/lehmann, consulted on March 21, 2016.

8. For a filming of this particular ritualized reciprocity see the documentary we made at my center available on our website: www.center-sachamama.org titled *Reweaving the Web*.

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