Ancestral Knowledges and the Ecuadorian Knowledge Society

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Abstract

The government of Rafael Correa (2007-2017) embarked on an ambitious project of diversifying the national economy to transition from a primary resource exporting economy to a competitive Knowledge Society and a Knowledge-Based Bio-Economy as biodiversity was conceptualized as the country's most significant comparative advantage. This paper traces how peoples' and nationalities' knowledges, so-called ancestral knowledges, were elicited in unprecedented ways in this context of bringing about a change of the productive matrix. While knowledge in general was reframed as an infinite resource, ancestral knowledges were made productive for a state-led project of capitalist modernization.

Keywords: Ancestral Knowledges | Knowledge-Based Bio-Economy | Ecuador

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1. Introduction

The Ecuadorian economy has historically taken part in the world economy as a provider of primary natural resources. Having promised to deliver a post-neoliberal turn and to recuperate the state’s development planning competencies, the government of Rafael Correa (2007-2017) embarked on an attempt to use extractivism to overcome extractivism, or as the National Development Plan puts it, “to sow oil and harvest a productive matrix for a Knowledge Society” (SENPLADES 2013: 17; El Comercio 2015). Hence, the Correa government launched its plan for diversifying the economy to counter its dependence on primary resource exports and international commodity prices, a so-called cambio de la matriz productiva, a change of the productive matrix. The government’s economic strategy aimed at developing an “endogenous development model” that places specific emphasis on knowledge and make biodiversity Ecuador’s most significant comparative advantage for transitioning to a Knowledge Society/ Knowledge Economy and, moreover, a Knowledge-Based Bio-Economy (SENESCOYT 2015b). In what follows I will explore in which ways peoples’ and nationalities’ historically subalternised knowledges have come to feature within the framework of a change of the productive matrix. I will first outline how Ecuadorian society was envisioned to transition from a “Banana Republic” to a Knowledge Society and Knowledge-Based Bio-Economy, to then sketch out how ancestral knowledges are invoked in this framework. Thereafter, I will focus on the government’s “emblematic university” Ikiam that was set up to contribute to a “Knowledge Revolution”, as President Correa put it (El Comercio 2015). The Knowledge Society framework encapsulates, as I will delineate here, both a redefinition of the nation in modernizing terms, providing a novel understanding of the role of knowledge for society and the economy and elicits subalternised knowledges in unprecedented ways, granting them a renewed place in the national imaginary and a redefined value for development.

2. From “Banana Republic” to Knowledge Society

Extractivism, as a mode of accumulation triggered by colonization with the formation of the capitalist world-system, relies on the removal of “large quantities of natural resources that are not processed (or processed only to a limited degree), especially for export” (Acosta 2013: 62). As critical scholarship and activism highlight, extractivist models of accumulation do not tend to bring about the promises of development they propagate (Gudynas 2016). Rather, such economies have been characterized by a concentration of exports in a few commodities and a distortion characterized by

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1 All translations hereafter are mine unless otherwise indicated.
limited diversification and integration between sectors, and hence by a dependence on demands of the global market, a subordinate position within it, and vulnerability to price volatility (Acosta 2013). Extractivism has led to considerable environmental degradation and pollution, dispossession, social tensions and socio-environmental tensions, and by such patterns as concentration of wealth, authoritarianism and, relatedly, the criminalization of resistance (Acosta 2013). The Ecuadorian economy has been based primarily on such exports of raw materials and therefore been marked by a dependency upon demands of the global economy. Attempts to diversify the economy in the past have either been limited or have failed to succeed substantially, which is why the Correa government launched its plan for a change of the productive matrix to reduce the country’s dependence on the export of primary resources and international market volatility (Acosta 2006 [1995]). The government sought to diversify the economy and increase competitiveness by promoting high-valued added exports (Villavicencio 2014a: 47-48; Wilson et al. 2015: 267-268).

Denouncing the international division of labour within which the Ecuadorian economy and society is situated at the provider-end of primary resources and environmental goods, as President Correa highlights, the Knowledge Society framework sought to reposition Ecuador in a world-system marked by an international division of (material and intellectual) labour (SECOM 2013). The aim was to transform the national economy from an economía primario exportadora, a primary resource export economy, to an economía social del conocimiento, a Knowledge Economy. As a Knowledge Society, Ecuador was envisioned to become a knowledge-exporting nation that draws from the potential for innovation, human talent, and creativity of its members. The change of the productive matrix, at which the construction of a Knowledge Society aims, is based foremost upon the notion of interchanging limited natural resources for an “infinite resource” – knowledge (Asamblea Nacional de la República del Ecuador 2015: 7). “The change of the productive matrix strives to promote the transition from a primary export economy based on finite resources to a knowledge economy based on infinite resources” (Vicepresidencia de la República del Ecuador 2015: 46).

As State Secretary René Ramírez put it during the inauguration of one the government’s flagship universities, Yachay, designed to generate applied research and thereby directly contribute to the change of the productive matrix, the petroleum boom should give way to a boom of knowledge:

If on Monday, July 26, 1972 the first barrel of oil was filled for export and the oil boom was set in motion in the country, symbolically and in a similar way, I could point out that today, Monday, March 31, 2014, the first generation of Yachay starts [their studies]. And so begins a cycle that we hope will generate a new boom, the knowledge boom (El País 2014).
The first popularized conceptualizations of a Knowledge Society or Knowledge Economy emerged in the 1960s and 1970s and later resurfaced in the 1990s in the US-American and European contexts, alongside other concepts such as new economy, information society, and network society; its formulation being primarily associated with the works of Peter Drucker (1959) David Bell (1973), Manuel Castells (1994), and Nico Stehr (1994) (Krüger 2006; Sörlin and Vessuri 2007; Walsh 2013). The term has been employed as a macro-scale concept in economics and sociology, and more specifically in the sub-discipline of the sociology of knowledge, to analyse changes undergone by post-industrial, post-Fordist economies. In general terms, Knowledge Society/Economy has been used to denote an epochal change marked by an amplified importance of knowledge for the economy and economic growth – a “transition [...] in advanced industrial nations from an economy based on natural resources and physical inputs to one based on intellectual assets” (Powell and Snellman 2004: 215). This emergence of a new phase of capitalism is marked, as scholars trace, by a process of restructuring of economies whereby intangible products become the new base of economic growth, while the tangible resources produced are increasingly dependent on knowledge-intensive sources. Alongside a marked importance of knowledge for the economy, so-called national innovation systems, information and communication technologies (ICTs), scientific knowledge production, expertise, and human capital gain currency (Krüger 2006; Díaz Bernal 2012). Santiago Castro-Gómez, amongst others, identifies a “postmodern restructuring of modern development”, dependent upon “the possibility of converting human knowledge into a productive force” (Castro-Gómez 2007: 437). The concept oscillates, all in all, between a (seemingly neutral) descriptive/analytical frame of reference and a normative and prescriptive outlook that is more often than not tied to assumptions about processes of modernization with teleological underpinnings. Beyond its contested usage as an academic concept, it has been criticized by some for having become a “buzzword”, and, more generally, a “master narrative” (Godin 2006; Forstorp and Mellström 2018). Following Bob Jessop, who affirms the production of a knowledge-based economy as an “ongoing achievement that involves active and extensive discursive as well as material work”, I foreground the Knowledge Society as a state project (Jessop 2010: 156).

The decade of Rafael Correa’s “Citizens’ Revolution” was, that being so, marked by a resignification of the role of knowledge and knowledge production for society and the economy, and thereby for the self-conception of the nation, and a renewed function of the state as knowledge. Knowledge production becomes to a greater extent a sphere of governmental concern and intervention. Redefining the role knowledge ought to play for society and for political economy, the state produces a new (modernized and modernizing) national self-conception, while it reproduces itself through new arenas for state intervention. As the National Plan of Science, Technology, Innovation, and
Ancestral Knowledges (2010) reads, by becoming a Knowledge Society, Ecuadorian society is envisioned to rise to partake in the “era of knowledge” – a “new era in the history of humanity” – by overcoming the “shortcomings” in its “national scientific culture”, thereby allowing for “opportunities of development and well-being for the population through knowledge” (SENACYT 2010). The Knowledge Society is intended to allow Ecuadorian society, conceptualized as lacking a consolidated scientific culture, to progress and for its citizens to partake “in the modern world”, as the Plan puts it, by strengthening national science and technology, the national education system, and fostering innovation and productivity (ibid.). This, State Secretary René Ramírez, states, “[…] will allow a break with history – to break with that history of Ecuador as a ‘Banana Republic’ to build Ecuador as a society of knowledge, creativity and innovation” (SENESCYT 2015b).

Denouncing, amongst others, previously inadequate state investment in science and technology and support in product innovation, the overwhelming majority of patents being registered by transnational firms and not Ecuadorian firms and institutions, as well as the shortcomings of the 1998 Intellectual Property Law in that regard, the government increased investment in and state influence over national education and scientific research, reformed the corresponding legal framework, built the “emblematic universities” Ikiam and Yachay, and constructed a new intellectual property rights law, the Código Orgánico de la Economía Social de los Conocimientos, Creatividad e Innovación, the Code of the Social Economy of Knowledges, Creativity and Innovation (hereafter COESC),2 aimed at consolidating a National System of Science, Technology, and Innovation. Put briefly, the government’s Knowledge Society project is marked by a tension between a discourse that foregrounds knowledge as a public good inspired by a critique of the enclosure of the commons, as well as of the international intellectual property rights system and international inequalities, and a project of capitalist modernization that is, first and foremost, interested in the potentials of the development of knowledge-based and knowledge-intensive goods and services for a competitive Knowledge Economy.

On the one hand, emphasis was placed on North-South asymmetries and the unequal distribution of patents and import-export of scientific attainments, software, and technology, and on countering the privatization of knowledge by highlighting the nature of knowledge as a public good. On the other hand, however, tensions ensued between

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2 The COESC was presented to the National Assembly by the executive in June 2015 and it was passed into law in October 2016 after having been drafted under a process of collaborative “wiki-legislation”. The COESC regulates the National System of Science, Technology, and Innovation replacing the Intellectual Property Rights Law of 1998 (Espinosa Coloma 2016; León Calle 2016; Villagómez Paredes 2018).
the government’s post-neoliberal policies like the democratization of access to public
education in the restoration of tuition-free studies, and the creation of innovation hubs
and specialized institutions like Yachay and Ikiam that foster a new triad between
the state, the university, and the market creating exclusionary circuits of value and
eliciting knowledge production directly applicable to the market and functional to the
state project. Such dynamics constitute a reproduction of a neoliberal Knowledge
Economy in the intricate interrelation between the state, the market, and the university,
and also represent an expression of a longer history of (indirect) state investment in
and knowledge-intensive products are thus made a key “resource” to fuel state-led
modernization efforts.

The sometimes conflicting emphases on knowledge as a public good and its simultaneous
rendering as a (commercialisable) resource confirm that the state is neither a unitary
and internally coherent nor monolithic entity, but encompasses different interests and
interest groups, discourses and standpoints, and different and diverging governmental
regimes (Saar 2011; Nicholls 2015). Japhy Wilson and Manuel Bayón explain that the
constituent parts of the COESC, that aimed at the “de-commodification of knowledge”,
were opposed by the more “pragmatic” branches of government to prevent frictions
with the terms of a free trade agreement with the European Union and trade in terms
of the World Trade Organisation – an international framework that according to State
Secretary René Ramírez acts as a straightjacket that hinders individual countries in
constructing alternative models (Wilson and Bayón 2017a: 136). Such frictions are
part of a larger tension within the Correa government, between currents that sought
to foster alternatives to growth-centred development and a state project that despite
proclamations of bio-socialism or Sumak Kawsay socialism, ended up representing a
project of capitalist modernization (Macas and Cholango 2013; Acosta 2014; Martínez
Abarca and Acosta 2014; Villavicencio 2014a; Walsh 2014).4

3 As Arturo Villavicencio points out, the government, with institutions like Yachay and Ikiam, de facto
promoted a type of university that is aligned to the state’s economic interests, as state investment
was concentrated in elite institutions that were envisioned to produce knowledges directly applicable
in the private sector, producing a triad composed of the state, the market, and an “entrepreneurial”
university (Villavicencio 2014b). As Villavicencio analyses, the state’s policy is based on false
assumptions and predictions about the Ecuadorian economy and its capacity of absorption of the
knowledge generated in those institutions, the relationship between knowledge production and its
direct applicability in the productive sphere, and therefore about the mechanisms that supposedly
would “trickle” down benefiting the economy and society (Villavicencio 2014a). Yachay, he argues,
would generate, if successful, a bubble divorced from the rest of the economy, and only a small
sector of society and the private sector, if at all, would thus benefit from the state investment in the
university (Villavicencio 2014a).

4 Pablo Ospina explains that more generally, throughout the years, the initial “progressive” coalition
of technocrats and leftists of the Correa government was gradually replaced by more pragmatic
and reactionary postures in government, thus explaining ensuing tensions between standpoints and
discourses (Ospina Peralta 2018).
In the context of this search for an “endogenous development model”, at the same time as knowledge came to be resignified as an “infinite resource”, biodiversity emerged as the country’s “biggest comparative advantage” and thus as one of the strategic axes of the national development scheme (SENPLADES 2009: 95). The government thus bid not only on the construction of a Knowledge Society, but on an economía del bio-conocimiento, an economy based on bio-knowledge (SENPLADES 2009: 95; SENESCYT 2017: 56). The new model of accumulation aimed at a “transition from the ‘finite resources’ of oil and other primary commodities to the infinite resources’ of ‘bio-knowledge’ (bio-conocimiento), understood as the application of Scientific knowledge to the immeasurable biodiversity of the Ecuadorian Amazon” (Wilson and Bayón 2017b: 57). Ortega-Pacheco et al. note that, “while developed countries’ efforts to achieve a transition to bio-economy heavily rely on bioenergy and biomass […], the Ecuadorian strategy focuses on biodiversity as a key building block of a sustainable economy, by means of – not limited to – knowledge-intensive products” (Ortega-Pacheco et al. 2018: 190–191).

As biodiversity came to be conceptualized as a (national) resource, its protection became a matter of national sovereignty at the same time as its potential economic output was foregrounded. In the context of a strategy for a change of the productive matrix, the Ecuadorian government became thus concerned with preventing biopiracy – the (illegal) commercial exploitation of biological/genetic material (and its privatization through intellectual property rights without means of compensation). The government sought to prevent the usurpation of biodiversity and its genetic material – the outflow of benefits derived from the utilization of biodiversity for, for example, industrial and pharmaceutical applications – and the privatisation of ensuing products and services via intellectual property rights on behalf of foreign research facilities and corporations.

The Ecuadorian Constitution declares national sovereignty over biodiversity (Art. 400), making biodiversity and its genetic diversity “inalienable, imprescriptible and non-seizable property of the state” (Art. 408). It furthermore declares biodiversity and all its genetic diversity among the strategic sectors over which the state has the right of administration (Art. 313). The national development plans establish, in accordance with the Constitution, biodiversity as one of the strategic policy sectors. The National Development Plan (2009-2013) declares biodiversity to be the country’s “biggest comparative advantage” (SENPLADES 2009: 95). The subsequent National Plan of Buen Vivir (2013-2017) reaffirms the promotion of bio-conocimiento as the alternative to the prevailing primary-resource export model. It prioritises the export of goods and services derived from it, defining it as a “catalyst of national production” (SENPLADES 2013: 69). As the export of goods and services derived from biodiversity were prioritised,
bio-technology was placed at the centre stage of a new strategy of accumulation and therefore also of science and technology development policies (Albornoz 2013: 239-240; Wilson et al. 2015: 268). Notwithstanding that the complexities of the construction of a bio-economy cannot be tackled here, it should be noted that in the Ecuadorian context, the development of a bio-economy is framed by a Constitution that proposes a redefinition of “development” in terms of the fulfilment of Buen Vivir, while respecting the rights of nature, thus posing particular challenges and potentials.

Having delineated the government’s project of a change of the productive matrix that would contribute to a post-extractivist future – and having hinted at some of the tensions and difficulties that characterized it, which will be looked at in greater detail with regards to the concrete case of Ikiam University – I will, in what follows, sketch out the ways ancestral knowledges became invoked and were made productive to contribute to this “endogenous development model”.

3. Ancestral Knowledges for an Endogenous Development Model

Historically, the subalternisation of peoples’ and nationalities’ knowledge systems has relied on racist (and simultaneously gendered) ideologies and been intimately tied to the construction and reproduction of the white-mestizo, modern-colonial nation-state and the cultural and material reproduction of coloniality. Peoples’ and nationalities’ customs, knowledges, and cultural expressions, considered generally backward, were deprecated and erased in the name of modernization, while peoples and nationalities had to be assimilated into white-mestizo society because their then so-called “lack of culture” or more generally “ignorance” and “pre-modern” ways of life were considered an impediment to development (Clark 1999; Clark and Becker 2007). Against this, peoples’ and nationalities’ communities and organizations have sought the resignification and (re-)construction of historically subalternised knowledge.
systems, and fought for the constitution of spaces for epistemic self-determination and the interculturalisation of the dominant epistemic regime (Macas and Lozano 2000; Macas 2005; Sarango 2016). The Constitution of 2008, product of a Constitutional Assembly that took into consideration and included social movement and peoples’ and nationalities’ demands, recognizes peoples’ and nationalities’ epistemologies and makes fostering, applying, and promoting diverse epistemologies a collective right (Art. 57, 12), and prescribing that it shall be a duty of the state to protect and promote ancestral knowledges (Art. 385.2; Art. 387.2) (República del Ecuador 2008). The constitutional recognition of epistemic diversity in that way is significant as it constitutes an unprecedented historical corrective to nation-state practices that have rendered peoples’ and nationalities’ knowledges invalid, as well as an obstacle to the state’s modernizing efforts. What follows from this noteworthy constitutional recognition? How are so-called ancestral knowledges invoked by the Correa government? What meaning are ancestral knowledges endowed with in the framework of the construction of a Knowledge Society and a Bio-Economy?

In the Foucauldian approach, objects do not predate power-knowledge relations. On the contrary, objects of knowledge emerge out of these relations – the point being that discourses do not adequately (or not) represent issues “out there”. Objects of knowledge, it is argued, do not just “pre-exist”: “[…] the exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information” (Foucault 1980: 51–52). Objects of discourses therefore do not await discovery or ever more detailed description as such, but are constituted through discourse and “under the positive conditions of a complex group of relations” (Foucault 2002 [1969]: 49). **Conocimientos ancestrales** thus constitute a specific object of discourse, as well as a contentious field of power-knowledge.

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8 The Constitution of 1998 already recognized the “freedom to engage in scientific and technological activities and the right of legal protection of its results, as well as of those of collective ancestral knowledge” (Art. 80), but it is only the Constitution of 2008 that significantly expands the recognition as well consolidates collective rights over ancestral knowledges (República del Ecuador 1998, 2008).

9 Article 57.12 gives peoples and nationalities the right to: “Maintain, protect and develop collective knowledges; their sciences, technologies, and ancestral knowledges; the genetic resources contained in biological diversity and agrobiodiversity; their medicines and traditional medicinal practices, including the right to recover, promote, and protect ritual and sacred places, as well as plants, animals, minerals, and ecosystems within their territories; and the knowledge of the resources and properties of fauna and flora.” It further prohibits “any form of appropriation of their knowledge, innovations, and practices” (República del Ecuador 2008).

10 Art. 385.2 establishes as an end of the National System of Science, Technology, Innovation, and Ancestral Knowledges to “Recover, strengthen, and empower ancestral knowledges” (República del Ecuador 2008).

11 Art. 387.2 states “It will be the responsibility of the state, 2: to promote the generation and production of knowledge, to encourage scientific and technological research, and to foster ancestral knowledges, in order to contribute to the realization of **Buen Vivir**, to **Sumak Kawsay**” (República del Ecuador 2008).
Different realms of knowledge (for instance related to health or the properties of medicinal plants, as opposed to pedagogies or architecture) are invoked in different manners and through different institutional frameworks and discursive practices, and different sectors of the population and different geographies are incorporated into these “governmental regimes”, a term I borrow from Esteban Nicholls, in differing manners (Nicholls 2015). Whereas, for instance, Montubio knowledges of the coastal regions are rarely an element of state discourse, knowledges of Afro-descendant communities do not feature within innovation paradigms as knowledges of the Amazonian nationalities and peoples do, but are much more likely to be invoked through the discursive regimes of “culture” and “tradition”. Put shortly, there is a wide range of spheres of state discursive practice and governmental regimes within which ancestral knowledges have come, in different ways, to be located following the constitutional declarations that will not be addressed here. What I argue here is that at the base of the production of ancestral knowledges as an object of state discourse lies a differentiation made in terms of those realms pertaining to culture, tradition, or immaterial (cultural) patrimony and those knowledges inscribed in and made productive for national development and, concomitantly, the realms of science, technology, and innovation. The disparate invocation of ancestral knowledges according to what they do is based upon and also reproduces a hierarchy between knowledges useful to the state project (through processes of validation by science and mechanisms of innovation) and those knowledges relegated, at best, to being worthy of legitimation through the sphere of culture or tradition. These hierarchies are based upon the relative utility ascribed to them in terms of their added value for the realization of strategic state goals: as will become apparent here, ancestral knowledges are invoked and revalorised ascribing, ultimately, their legitimacy to the relative value that can be contributed to national development.

In the framework of the change of the productive matrix, ancestral knowledges are primarily invoked through the languages of loss and protection, as well as riches and potentialities. State discursive practice oscillates between protection and (adequate) utilisation or exploitation, whereby protection also opens up spaces for state intervention that is ultimately conducive to exploitation. On the one hand, there is a prevalent discourse that highlights the need to protect ancestral knowledges, which ranges from framing the matter in terms of rights of peoples and nationalities, to framing it in terms of North-South inequalities, and the country being robbed of potential riches. On the other hand, there is a ubiquitous discourse that (although sometimes also under a banner of protection) more overtly argues in favour of utilisation/exploitation, and that produces ancestral knowledges as a strategic component for the change of the
productive matrix under a profit-oriented perspective (Acosta 2015). Protection and exploitation (*aprovechamiento*) were hence interwoven in state discourse.

The National Plan for Science, Technology, Innovation, and Ancestral Knowledges (2010) and the subsequent Plan for the Social Economy of Knowledge, Creativity, Innovation and Ancestral Knowledges (PESC) (2017), explicitly refer to ancestral knowledges not only as riches that need to be protected, but also need to be put to good use and be “inserted into production and development” (SENACYT 2010; SENESCYT 2017). Likewise, the Ecuadorian Institute for Intellectual Property (IEPI) maintains that its guidelines for policy on intellectual property shall “guarantee the adequate and equitable exploitation” of ancestral knowledges (IEPI 2017a). Along those lines, the Correa government was concerned with the disappearance of so-called ancestral knowledges and their potentials, as well as their undue appropriation by third parties. As Ximena Ponce, state representative from the Secretariat of Higher Education, Science, Technology and Innovation (SENESCYT) puts it: “There has been no protection; and we have been the [target], as a country, and as communities, even more so, of biopiracy. Our knowledge has been stolen, produced, processed, and sold back to us” (SENESCYT 2017).

Being framed as an element of the country’s riches, peoples’ and nationalities’ knowledges become nationalized by being framed as a collective good – as “our knowledges” (ibid.) – a collective good that is framed to benefit the nation as a whole.\(^\text{12}\)

The search for an “endogenous development model”, as propagated by government officials, has thus led to a conceptualisation of both natural and cultural (or epistemic) diversity into a potentially exploitable resource. As State Secretary René Ramírez proclaims: “We have to bet on the generation of knowledge and scientific production from a national perspective, according to our needs, but also according to our potentialities, which in this case are precisely that great cultural diversity and also that great natural biodiversity” (SENESCYT 2015a).

Ancestral knowledges become *national resources*, to which the state resorts, when paired with science, as vehicles for innovation. In that vein, the national development plan, the National Plan of *Buen Vivir* (2009-2013), reads:

> From a strategic perspective, the development of knowledge with high added value is essential, as well as technical and technological research and innovation. The combination of ancestral knowledges with state-of-the-

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\(^{12}\) For instance, Ximena Ponce, undersecretary of SENESCYT, when presenting the new COESC clarified that “the perspective is the use and utilization of traditional knowledge in and for Ecuador”; SENESCYT advertises the COESC with a video titled “INGENIOS, Combats Biopiracy and Prevents the Theft of our Wealth”; and the IEPI can be read tweeting “The #CódigoINGENIOS guarantees the adequate and equitable exploitation of our ancestral knowledges” (SENESCYT 2015a; IEPI 2017b).
art technology can generate the restructuring of the development regime, sustained by bio-knowledge. In the medium term, it is expected that local and exportable production will be based on the development of science, technology, and innovation, on the basis of biodiversity (SENPLADES 2009: 162).

Ancestral knowledges, particularly so-called knowledges related to biodiversity, were sought to be integrated into the dominant system of scientific knowledge production, by “scientifically proving” their validity and/or by becoming resources for science and innovation, and potentially being inserted into capitalist economy. The invocation of ancestral knowledges as conducive to modernisation by means of innovation depends upon their fragmentation into elements that can be picked apart by modern science and technology and their decontextualisation from the epistemology and territoriality out of which they emerge. Through a process of distillation, state discourse discerns those knowledges capable of being integrated into the understanding of modern epistemology from those elements not functional to or that stand at odds with it. Peoples’ and nationalities’ knowledges were remapped discursively as contributing or being conducive to futurities that promise ruptures with a past of Ecuador as a “Banana Republic”. At the same time, peoples’ and nationalities’ knowledges are fixed onto a past by means of the denominator “ancestral”, and produced, in contrast to universal science, as culturally specific. Ancestrality as state discourse reinforces the notion that, in contrast to science and its universal nature, these knowledges exhibit a particular historicity, are tied to specific genealogy and form of cultural reproduction whose fixedness and purity that demarcates them from the (constantly with the rift of innovation changing and modernity-making) scientific knowledge. The way the denominator “ancestral” is employed is thus directly related and purposeful to, the way these knowledges are inserted into a framework that tries to make them exploitable by being explorable by science, innovation, and applied research projects.

As mentioned before, with the resignification of biodiversity, endowed with a new value as the country’s biggest comparative advantage, so-called conocimientos tradicionales asociados a la biodiversidad, traditional knowledges related to biodiversity, emerged as an object of discourse and object of particular interest. The government, denouncing biopiracy, became increasingly concerned henceforth not only with the undue appropriation of biodiversity resources, but also with peoples’ and nationalities’ knowledges related to them. The underlying rationale is that local communities facilitate the process of identification of biodiversity resources thereby providing a time and cost efficient means of access for bioprospecting enterprises. As an article by the newspaper El Universo states, quoting the director of the IEPI at the time:

13 Bioprospecting denotes the systematic search for economically valuable biochemical and genetic information for the development of products in pharmaceutics, agriculture, cosmetics, nanotechnology, amongst others.
the president of the governmental Ecuadorian Institute of Intellectual Property (IEPI), Andrés Ycaza, explained that Ecuadorian law recognizes the country’s millenary cultures and “their collective knowledge associated with biodiversity”, which in his opinion helps to “save time” for scientific research (El Universo 2011).

Interests in the potentials of ancestral knowledges became particularly conspicuous in 2014 surrounding the negotiation of the trade agreement with the European Union and the discussions on the proposed amendments of the Constitution. The 2008 Constitution, next to the collective rights it establishes over peoples’ and nationalities’ knowledges, prohibits any appropriation of collective knowledges as well as of genetic resources. It furthermore forbids the “granting of rights, including intellectual property rights, to by-products or synthetics obtained from collective knowledge associated with national biodiversity” (República del Ecuador 2008: Art. 402). The amendment to the Constitution, promoted by the executive and SENESCYT would allow the “access” to and “usage” of ancestral knowledges, provided that there is consent of and an “equitable share of benefits” for affected communities (Ecuador Inmediato 2014; El Universo 2014). Furthermore, Art. 322 and Art. 402 would be amended to allow for the granting of intellectual rights over:

processes and products derived or synthesized, obtained from the collective knowledge associated with national biodiversity, provided that the communities, peoples, and nationalities, as the legitimate holders of such knowledge, share fairly and equitably in the benefits obtained in a sustainable and sustainable manner (Ecuador Inmediato 2014; SENESCYT 2014).

President Correa argued that it would be nonsensical not to exploit these knowledges, in ways that remind of the time when he suggested that environmentalists and peoples and nationalities should not oppose extractivism, as this would make Ecuadorians “beggars sitting on a sack of gold” (Dávalos 2013):

If the Waorani discover a cure for cancer and that would result in billions of dollars that could lift them out of poverty, they cannot patent it because any form of appropriation of their knowledge is forbidden and it will be patented in a laboratory in the United States or any nationality in Colombia or Peru (Ecuador Inmediato 2014).

The proposed changes were legitimized by arguing that the existing articles of the Constitution were too prohibitive and not in the “best interest” of peoples and nationalities nor of humanity as a whole. Correa was quoted in Ecuadorian newspapers regarding the need to reform the three articles of the Constitution, stating that the existing articles of the Constitution “do not benefit Indigenous and ancestral peoples” and
that with the amendments the government would be “helping ancestral peoples and humanity” because the original articles of the Constitution are “condemning peoples to poverty” (Ecuador Inmediato 2014; El Comercio 2014; El Universo 2014). At the time, the Correa government was negotiating a trade agreement with the European Union. It is suggested that the amendments were required to facilitate the negotiation process, because the articles of the Constitution in question “stand in conflict with […] pharmaceutical and agricultural development” and stand in the way of an agreement with the EU” (El Universo 2011; Cuvi 2015: 109-110). The tensions surrounding the amendments of the Constitution led Walsh to argue that:

We seem to be going back to earlier times – times that, in fact, have never really ended – where extractivisms, including and more particularly epistemic extractivism, still stand. But also, and at the same time, we are walking towards present-future modernization, today with the capitalization and consumption of ancestral knowledge. Here, without a doubt, a new non-explicit right is being offered: the right for Indigenous and Afro-descendant individuals to participate in the marketing of millenary and sacred knowledge, and the right to receive very good compensation. Would that be evidence of another FTA? I am referring to a Free Knowledge Agreement (Walsh 2015a: 280).

The Confederation of Indigenous Nationalities (CONAIE), opposing the commodification of collective knowledges, issued during its Fifth Congress in 2014 a resolution opposing the government’s economic strategy. The resolution states that CONAIE decides to reject the policies of the change of the productive matrix “[…] because it intensifies the dispossession of the ancestral knowledges of peoples and nationalities and benefits the interests of transnational corporations and national and foreign power groups” (CONAIE 2014).

If one understands the state to reproduce itself by simultaneously furthering spheres of governmental intervention as well as objects of discourse and related rationalities (Nicholls 2015), one can identify here a parallel discourse invoking ancestral knowledges as both in danger of loss and as riches, that reproduces the state by creating a legitimate sphere of intervention for protection and utilization. As biodiversity and related knowledges were placed at the centre of a new economic policy and concomitantly the protection from biopiracy becomes necessary, the state became concerned with regulating bio-prospecting and access and benefit sharing, and developing a *sui generis* legal framework concerning traditional knowledges. The relocation of certain expressions of subalternised knowledges within the jurisdiction of the state arguably grants the state not only a specific power to define their legitimacy, but also the mechanisms for managing them. Although it remains an unresolved issue how peoples’ and nationalities’ knowledges can be protected from appropriation and
commercialization and what role the state and national laws can play therein, I argue that the aforementioned tensions between protection and utilization/exploitation are written into the legal framework as it too oscillates between establishing collective rights while also creating a framework to access and benefit from ancestral knowledges. As Stephanie León Calle highlights, the new intellectual property rights, the COESC, represents an advance in regard to establishing collective rights over “traditional knowledges” as well as granting communities the right to (binding) prior consultation (León Calle 2016: 61-62). At the same time, the COESC in practice establishes the means for the usage and exploitation, and that furthers and legalizes third party access, as well as the distribution of benefits related to peoples’ and nationalities’ knowledges, as Acción Ecológica, Ecuador’s most important environmentalist NGO warrants, making way for the enclosure of knowledges through exclusive intellectual property rights (Acción Ecológica 2015a, 2015b). There is thus a tension between a Constitution that establishes collective rights over peoples’ and nationalities’ knowledges and prohibits their appropriation, and an intellectual property rights framework that establishes the mechanisms of exploitation and distribution of benefits (Acosta 2015: 15–16). Indeed, as Ecuadorian lawyer Ismael Villagómez affirms, COESC’s “positive protection” stands in conflict with the Constitution’s “negative protection”, as he puts it, by way of the establishment of a process of authorizations and contracts that would be grant (exclusive) rights to third parties (Villagómez Paredes 2018: 53). The law, more generally, falls short of an integral placement of peoples’ and nationalities’ knowledges in their socio-economic, political, and cultural contexts and in relation to plurinationality and rights to self-determination. What is more, the bylaw of the COESC effectively reverses some of the advances of the law by drawing conditions that ultimately magnify the state’s power to intervene upon such knowledges.14

To conclude, the revalorization of historically subalternised knowledges is inscribed in a hierarchy of those knowledges that can be made productive in the framework of and for the dominant socio-political and economic regime and related epistemic regime or rationality. While some knowledges are relegated to a secondary place, other knowledges, historically denied, are inserted into new imaginaries of progress and development and bestowed with the potential of being of service to a new state-led development framework and consequently to a new economic model. Revalorisation under these terms depends upon processes of redefinition and compartmentalization

14 The bylaw to the COESC, the Reglamento al Código Orgánico de la Economía Social de los Conocimientos, issued on January 7, 2017 by Presidential Decree 1435, effectively amplifies the state’s power over peoples’ and nationalities’ knowledges. Art. 51 weakens the rights of peoples and nationalities by establishing that the state has a right to “subrogate the rights of legítimos poseedores” “when [they] cannot be identified because the knowledge is widely disseminated” (1), for reasons of public health (2), and in case there is only one legítimo poseedor alive (3) (Presidencia de la República del Ecuador 2017).
of the elements of peoples’ and nationalities’ knowledge systems. One can thus identify a series of interrelated effects of state recognition: first, a redefinition of the value of ancestral knowledges given a national importance and also an importance as a strategic resource for an endogenous development model; second, an adaptation of ancestral knowledges as they are discursively repurposed for ends of research and innovation and thereby ultimately for national progress; and third, a reductionism, upon which the former two depend, as ancestral knowledges are decontextualized of the socio-political context and worldview they form part of and their territoriality, or differently put, partitioned off their rootedness in a specific epistemology, pedagogy, and ontology. While science and technology are reified as a path to progress and biodiversity is reduced to a “raw material for the production of commodities and for the maximization of profits”, the state compartmentalizes singled-out knowledges from the broader epistemology they form a part of (Shiva 2007: 309; Walsh 2015a: 280). Historically subalternised knowledges become considered “measurable and tangible”, instead of being recognized as “epistemologies and methodologies”, “linked with the collective choice for a differentiated existence [in a given] territory” – that is, “knowledges interlinked with and part of life itself”, as Juncosa puts it (Walsh 2015a: 280). Essentially, elements of historically “other(ed)” epistemological frameworks are validated when they can be made functional to the state project; are only admitted however, as long as they do not pose a threat to the status quo. As Marisol de la Cadena affirms, ancestral knowledges remain “[…] worthy of preservation as long as they [do] not claim their right to define reality” (Cadena 2010: 346). As ancestral knowledges are put to work for (imaginaries of) capitalist modernization, the recognition of historically subalternised knowledges as in their unprecedented public outtake is above all else “pragmatic” (Castro-Gómez 2007: 441).

4. From a Boom del Petróleo to a Boom del Conocimiento?

In the framework of bringing about a change of the productive matrix, the Amazonia came to be envisioned as the largest “living laboratory” that Ikiam, one of the government’s flagship universities, was designed to take advantage of to develop products and services to fuel a knowledge-based bio-economy (Ramírez Gallegos 2013: 45). A bio-economy has no singular definition, as its features depend on the specific policy framework as well as specific market characteristics. Put shortly, a bio-economy generally refers to the usage of biological resources for the provision of products, processes, and services in an attempt to develop a “sustainable economic system”, gradually replacing non-renewable raw materials (Ortega-Pacheco et al. 2018: 188). While the development of a bio-economy is commonly understood as a necessary response to climate change and environmental degradation, critical perspectives
warrant, however, that it can give way to a neoliberal extension of market rationales and mechanisms into even further realms of life and ultimately aims at producing *sustainable capital*, next to *sustainable capitalism* (Birch et al. 2010; Pavone 2013).\(^{15}\)

In this regard, sustainability would constitute an “inefficiency to be overcome through a techno-knowledge fix” which relies on the development of knowledge and technologies that “reorient [...] the biophysical characteristics of nature [...] in order to increase productivity and thereby the accumulation of capital” (Birch et al. 2010: 2901-2913).\(^{16}\)

Pertaining knowledge is in turn enclosed through private property regimes upon which its market value depends (Birch et al. 2010: 2910-2913).

The construction of the *Amazonia* as a vast territory of abundance and as a resource for bioprospecting enterprises – also called “gene hunting” – parallels the colonial construction of nature of colonized territories as of “excessive abundance” and as source of infinite riches (Machado Aráoz 2015: 12-13). Biotechnological development can entail, however, a new form of construction of nature. Capital, it is argued, seeks to intervene directly in the “internal and generative structure of ‘nature’ itself, transforming it into a productive force with the capacity to intensify the extraction of relative surplus value” (Wilson et al. 2015: 270). Juan Camilo Cajigas-Rotundo argues these processes constitute a postmodern colonization of nature:

> In effect, with the rise of biotechnology and genetic engineering, associated with the so-called life industries, nature ceases to be a “natural resource”, insofar as it is no longer an external instance, but begins to be situated on a “plane of immanence”, articulated through the very logic of capital reproduction. The new turn consists in that capital axiomatizes (Deleuze and Guattari, 2000) the internal constitution of the living, through the modelling and the genetic design. If to the modern form of capital corresponds a molar colonization of nature, to the postmodern form corresponds a molecular colonization, which constitutes hypernaturalities or technonaturalities (Cajigas-Rotundo 2007: 175).

Ikiam, inaugurated in 2014 as a public university near the city of Tena in the Amazon region, was set up to catalogue biodiversity, identify “potentially marketable active agents, and [advance] their patenting and commercialization”, thereby contributing to

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\(^{15}\) Ulrich Brand, similarly, cautions that the concept of a “green economy”, that has gradually gained currency over and above the “sustainability” discourse, could evolve into an oxymoron if careful attention is not granted to “ask under what conditions a greening of an economy takes place, which societal interests are strengthened, and which understanding of the economy and well-being is promoted” (Brand 2012: 31).

\(^{16}\) Modified crops, for instance, constitute an example of how such knowledge-based bio-economy relies on the imperative to develop knowledge on the biophysical characteristics of natural “resources”, to increase their productivity (Birch et al. 2010: 2902; 2910). Nature is henceforth “(re)made to work harder, faster and better” (Boyd et al. 2001: 563-564 cited in Birch et al. 2010: 2901).
the development of value-added exports (Wilson and Bayón 2017b: 59). As explained by an Ikiam official interviewed by Wilson and Bayón:

[...] the aim is “to exploit the megadiversity of the Amazon [...] What we want, essentially, is to study a plant, learn how it is used in the [indigenous] community, test its active ingredient and isolate this type of drug in distinct cellular models”. The resulting products are to be marketed by the Centre for Entrepreneurship, which is devoted to “the commercialization of patents [...] Each time that the researcher has found a new method of extracting a component [...] we [will] help them to start the process of getting a patent” (Wilson and Bayón 2017b: 59).

The bio-economy model that Ikiam sustains, Villavicencio argues, is based on the “logic cacao-banana-oil” – and now biodiversity (Villavicencio 2014a: 47-48). Resting on the commercialization of nature, it replicates the “dangerous rationality that does not escape the logic of the extractive model” (ibid.). The university is made functional to the processes, he argues, by which further and further realms of life are inserted into a capitalist economy. As dynamics of capital privilege the development of science and technology for a more efficient use of resources, postmodern forms of capital rely on new forms of colonization of nature (Villavicencio 2014a: 123). He maintains:

[...] the university becomes part of a process of capitalization of nature in which the dynamics of capital privilege new biotechnologies, which capitalize on nature by planting value in it through scientific research. Then, under a developmentalist vision, the change of the productive matrix on the basis of capital and technological science, biotechnology and the projects that sustain it appear not as a neutral enterprise, but as an activity linked to the reproduction of capitalist social relations (Haraway, 1997; quoted in: Escobar, 1996). [...] This confirms once again an economic and social policy of the government consisting in a progressive modernization of capital or, perhaps to be more precise, at least in its relation with nature, this policy would embody postmodern forms of capital through new forms of colonization of nature. Thus, Ikiam University should be seen as part of the creation of knowledge directly related to capital to the extent that its aim is to incorporate nature into the law of value (Leff, 1995) (Villavicencio 2014b: 21-22).

As Wilson and Bayón identify, the appropriation of ancestral knowledges is central to the processes by which, through Ikiam’s work, biodiversity emerges as a (commercialisable) resource, as local communities are identified as gateways to research and bioprospecting activities (Wilson and Bayón 2017b: 60). In their visit to Ikiam in November 2015, Wilson and Bayón found Ikiam employees negotiating a pay scale with members of local communities for the provision of services that “included manual labour such as trail cutting alongside the provision of specialist knowledge” (Wilson and Bayón 2017b:61).
An organizer of the event interviewed by Wilson and Bayón explained that at the workshop they:

  didn’t want a bunch of political speeches about “You’re exploiting us”, but rather wanted […] really pragmatic advice […] “What do you think it’s worth? What do you think they should pay you?” We wanted that kind of pragmatic stuff (Wilson and Bayón 2017b: 61).

When during the workshop a Shuar representative of CONAIE intervened and voiced his concerns, stating “we’ve never given up our science for commercialisation, it’s a cultural way of life”, Indigenous participants, carefully selected and invited, collaborating with Ikiam researchers, later on argued that “this is an expert meeting”, and “what’s important is to move forward [with the negotiations with Ikiam], if we don’t, no one will do it for us, and Ikiam will go on without us” (Wilson and Bayón 2017a: 148-149). Wilson and Bayón argue that the workshop not only led to a “social construction of a commodity”, but also exemplifies what has been regarded as a “post-political” modality of neoliberal environmental governance, in which a naturalised market logic predetermines the coordinates of debate, “irresponsible” partners are excluded, and antagonisms are disavowed by “displacing conflict and disagreement onto the terrain of consensually manageable problems, expert knowledge, and interest intermediation” (Swyngedouw, 2010b: 227, 225; Wilson and Bayón 2017b: 61).

As local communities become service providers and their knowledge becomes a commodity, Ikiam, reproducing a neoliberal Knowledge Economy, is thus de facto contributing to the “transformation of infinite resources into finite resources” through the commercialization and privatization of biodiversity and collective knowledges via the granting of rights, including those of intellectual property (Wilson and Bayón 2017b: 61).

The local population had hoped that with the inauguration of Ikiam access to higher education would improve, ameliorating the uneven national distribution of higher education offers (Wilson and Bayón 2017b). The aim to make Ikiam competitive internationally, however, legitimated an admission procedure based on test scores that disadvantaged local students (due to uneven national primary and secondary education provision) and thereby largely excluded local students from the university (Wilson and Bayón 2017a: 150). At the same time, other forms of exclusion and territorial interventions were fostered as local communities were forbidden to access, despite its common and ancestral uses and values, the newly set up Colonso-Chalupas Biosphere adjacent to Ikiam – its “living laboratory” – to guarantee research and prevent hunting and illegal felling by the Ministry of Environment (Wilson and Bayón 2017a: 151). Outside of the biosphere, the lack of a territorial strategy has led to displacement of
the local population, the soaring of land prices, and chaotic processes of urbanization (Wilson and Bayón 2017a: 153-154). Wilson and Bayón therefore conclude that Ikiam “intensified the historical dynamics of unequal geographical development in the Amazon region” (Wilson and Bayón 2017a: 155).

Due to funding cuts related to the plunge of oil prices in the international market that impacted state budget, Ikiam has been unable to actually perform the “real subsumption of nature” – by which nature is exploited not in its found state but by being “manipulated to increase yields, enhance metabolisms, and intensify industrial productivity” – that it was set up to bring about (Wilson and Bayón 2017b: 57). Lacking the adequate laboratory equipment and funding (as well as a consolidated national biotechnology sector), Ikiam’s activities were largely reduced to basic research and the production of inventories, then exporting the materials for further development elsewhere:

A strategy for the real subsumption of nature to capital through the patenting of genetic sequences and the development of biotechnological commodities is in danger of being reduced to a further iteration of the formal subsumption of nature on which the Ecuadorian economy has traditionally been based, with Ikiam extracting primary resources in their raw state in the form of flora and fauna samples, and exporting them for development and incorporation into processes of real subsumption underway elsewhere (Wilson and Bayón 2017b: 60).

Ikiam would under such circumstances only be reproducing the resource export model that the Correa government attempted to overcome, only now based on unprocessed biogenetic resources, to be further developed in research centres elsewhere, most likely in the global North (Wilson and Bayón 2017a: 170). A state project aimed at reducing the outflow and therefore inadequate distribution of the benefit derived from biodiversity and ancestral knowledges thus ends up reproducing the model by which the Ecuadorian economy has provided the raw materials to the global market. It should be noted, however, that the global market, as Wilson and Bayón warrant, relies on the “expansion of the primary resource frontier in ‘resource-rich’ regions of the world […] for processes of real subsumption underway in the global centres of industry”, thus significantly constraining attempts to overcome such international division of labour and also the production of alternative economic models (Wilson and Bayón, 2017: 62-63). Indeed, under the Correa government, extractivism has not been overcome but rather has been significantly expanded.

As activists and scholars identified with disillusion that Latin America’s “progressive” or “left-wing” governments seemed not to substantially reform the primary commodity export model that has shaped the region’s economies since colonial times, or were unable to do so, “neo-extractivism” came to denote how despite some reconfigurations,
there has been no *substantial* change in the model of accumulation (Gudynas 2009; Acosta 2013). While neo-extractivism, put briefly, continues to cause severe social and environmental damage, it is primarily differentiated from previous primary resource export models by greater state participation in extractive industries or in their regulation, as well as over generated surplus (by way of (re)negotiated contracts, higher royalties, and taxation), which is invested in social programmes (Gudynas 2009). Akin to other neo-extractivist models, the government of Rafael Correa re-established state power over and involvement in the extractivist industries and reinvested revenues for social programmes and infrastructure projects. The expansion of the extractivist frontier, the introduction of large-scale mining, the passing of the *Ley de Semillas*, the Seeds Act, which gave way for the introduction of genetically modified seeds, amongst others, have caused severe tensions between the government and peoples’ and nationalities’ organizations. Strained relations over the 2009 water and mining laws, and the standstill of the Yasuní ITT initiative, led early on to a discontinuance of dialogue on behalf of CONAIE, who accused Correa of being a “deceptive socialist traitor, populist, genocidal, fascist to the principles of *Sumak Kawsay*, who disguises the colonialism of the 21st century” (CONAIE 2010: 2, cited in Altmann 2013: 294). President Correa dismissed such claims as infantile environmentalism, while at the same time juxtaposing supposed “Indigenous interests” with interests of “the people” which reinforced Indigenous alterity and bolstered the urban, *mestizo* figure as the representative of national interests, paralleling earlier racist discourses that infantilized and constructed peoples and nationalities as not sufficiently “rational” for participation in national politics (Viatori 2014; Sigsfeld 2015; Larrea Maldonado 2016: 115).

As shown here, neo-extractivism, as in the expansion of primary resource extraction with greater state participation, coincided with processes by which new spheres were made productive, as in biodiversity and its biogenetic resources. Such new forms of insertion of nature into capitalist circuits have relied on highly specialized knowledge centres – Ikiam and Yachay – which aim at knowledge production for market applicability and are divorced from both the local economy and the system of higher education (Villavicencio 2013, 2014a). Because the change of the productive matrix, as an attempt to modernize the capitalist model of accumulation, has relied on state revenues from extractivism, when international commodity prices plunged, the model of a knowledge-based bio-economy that Ikiam sustains, being reliant on bio-technological development that is highly capital intensive, was reduced, as Wilson and Bayón delineate, to reproducing the extraction of unprocessed natural resources (Wilson and Bayón 2017b). The experiences of the government’s project of a change of the productive matrix therefore point to the difficulties faced by primary resource exporting economies in trying to overcome their position in the global market, as well as the limits posed by the international system of intellectual property rights for
alternatives to the enclosure of the commons.

Peoples’ and nationalities’ knowledges and resources found in their territories, as I have traced here, are caught up in these developmentalisms that rely, in David Harvey’s words, on accumulation by dispossession – be it extractivism, neo-extractivism, or a change of the productive matrix as in the development of a Knowledge Society/ Knowledge-Based Bio-Economy (Harvey, 2014: 251, cited in Wilson and Bayón 2017b: 61).

5. Conclusion

The project of a change of the productive matrix stated that “unlike orthodox perspectives of growth, [it] incorporates knowledges, a diálogo de saberes, information, science, technology and innovation as endogenous variables of the productive system” (SENPLADES 2009: 95). A diálogo de saberes – far from its formulation in terms of decolonization – comes to stand, as I have delineated here, for the utilization and appropriation of historically subalternised knowledges. The (decolonizing) potential of the constitutional recognition of epistemic plurality, I argue, is curbed by state discursive practices and disciplinary processes by which ancestral knowledges are converted into riches to be protected and “adequately exploited” in the context of promoting innovation necessary for growth in the context of cognitive capitalism. Unlike previous developmentalism that equated progress with homogenization and assimilation, epistemic difference is converted into a resource while science is reproduced as a path to progress. Although it remains an issue of contention how peoples and nationalities can best protect their knowledges from appropriation and privatization by others, the state discursive practice and governmental regime delineated here, in sum, lays the ground for what Walsh describes as “epistemic extractivism” (Walsh 2015b).

To conclude, State Secretary Ramírez proclaimed that the boom del petróleo would give way to a boom del conocimiento. At the same time as neo-extractivism was deepened and the natural resource frontier was expanded, the attempted modernization of the economic model, despite proclamations of Buen Vivir, has deepened and reconfigured coloniality in the way not only the resources found in ancestral territories, but also peoples and nationalities’ knowledges are to be integrated into capitalist economicism, understood as the subsumption of aspects of life, as well as the means of their comprehension, into rationalities of capitalist economy. The 2008 Constitution invites Ecuadorian society to “think with” ancestral knowledges to rethink and move beyond modern developmentalism (Walsh 2010: 19). Not only did the break that Sumak Kawsay introduced in the Constitution not materialize, but as I have shown in this
paper, there is a restructuration of coloniality marked by processes of accumulation by dispossession underway as capitalist accumulation is (attempted to be) restructured.

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