

[Agro-extractivism inside and outside BRICS: agrarian change and development trajectories]

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BRICS countries, Extractivism, Expolary Economies and Alternative-oriented Struggles

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BRICS countries, Extractivism, Expolary Economies and Alternativeoriented Struggles¹

Jingzhong Ye, Teodor Shanin, Sergio Schneider and Jan Douwe van der Ploeg

Abstract

In this paper for the 4th BICAS Conference to be held in Beijing in November 2016 we argue, firstly, that the so-called BRICS countries very clearly exhibit the dynamics and shortcomings of the extractivist economic model that increasingly dominates the world. Secondly, the paper explores the responses that are actively being constructed to counter the, often asphyxiating, effects of this model. These give rise to differently patterned economic systems that exist and interact within one and the same politico-economic setting. Following the earlier work of Shanin we refer to these different systems as expolary economies. We understand such economies as emerging out social struggles that are oriented at the construction of new socio-economic patterns that are alternative to the dominant mode of capitalist production. Thirdly, we argue that critical studies urgently need conceptual tools to better understand and describe these expolary economies and the associated, alternative-oriented resistance and struggles.

Keywords: extractivism, expolary economies, alternatives, resistance

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¹ This draft paper is, as yet, not having a fully developed bibliography.

1 The extractivist model

After a period of exceptional economic growth, most BRICS countries are now confronted with persistent and deepening crises that closely follow the general decrease in the prices of the main export commodities. These crises have a number of effects including large reductions in state budgets which increasingly exclude the continuation of socially redistributive programmes (of the assistentialist type) at the very moment that they are needed more than ever. The emergence of BRICS countries as rapidly expanding economies and their subsequent downfall highlights the centrality of extractivism in these economies – just as the linkages between extractivism and social redistribution of some of the obtained value highlight the difficulty of transcending the limitations of the extractivist model.

Extractivism is not limited to different forms of mining, nor to specific forms of agriculture and forestry². In the current era, extractivism has become the main model that structures large sectors of the economy, including considerable parts of industrial production, financial engineering and different types of service provision. Extractivism is not just limited to the BRICS countries. But we can ask what leads (at least some) BRICS countries to so wholeheartedly follow the extractivist model?³

'Draining' is a key feature of extractivism. Within the extractivist model, the main actors drain the value produced by others instead of actively producing value themselves. Extractivism drains value in as much as it assures cheap access to raw materials. It also drains value by setting highly unequal exchange relations. Often, extractivism is not grounded in production – but rather tends to be based on control over circulation. Finally, it does not develop productive forces – instead it results in a widespread degeneration of resources and then turns the problems that it brings to the fore into new sources for further profit-making. As a result extractivism produces a highly regressive redistribution of appropriated wealth.

Oligopolistic networks play a central role in extractivism. They increasingly structure the production, circulation and consumption of products and services, and in so doing, centralize the wealth resulting from it within the centres of the networks.

These networks, which can be referred to as 'imperial networks' 4, basically control flows (of commodities, of whatever type). This control may reside in the ownership of the infrastructure through which these commodities flow; it may reside in the legal or de facto ownership (no matter how it was established) of specific resources; it may also reside in the ownership of non-material features (such as images, brands, reputation, knowledge, etc.); it may even reside in the properties of products that were intentionally built into them (GMOs, flex-crops, etc.). The point is that these networks (through which the accumulation of capital occurs) are no longer factory-based (as was the case in classical capitalism). There might be factories (wherever located) but these are no longer the centres of the regimes. Today's factories are interchangeable. The inclusion of particular factories and the exclusion of others critically depends on the centres (le cupole) of the imperial networks. These networks exert

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² Extractivist economies are oriented at obtaining the highest possible revenue in the short term without making any investments in the continuity of production. They neglect reproduction. This is typically the case in large scale production of soy beans, palm oil and eucalyptus trees. Asparagus production in Peru is another, now nearly classic, case. All these cases end up (or will end up) by destroying the eco-systems they use. In the case of mining no investments are made to develop alternative sources that can be used once the current ones are exhausted. Extractivist mining is also highly destructive to eco-systems. More generally phrased – extractivism basically implies the draining and, in the end, the destruction of the reproductive fields upon which it is based – a feature that holds true for *all* extractive economies.

³ Some reasons can easily be specified: the presence, and accessibility, of cheap resources (be they land, labour, minerals, water or whatever); a strong export-orientation among the ruling *elites*; the absence of a welfare state; and local, regional and/or national *elites* who play a key role in and benefit substantially from extractive edifices.

⁴ In the sense that they nearly always operate globally and, more importantly, they are operated as if they represent 'mastership of the universe'.

control over the factories and appropriate the value that was once centralized within the factories (i.e., by the owners of the factories). Nike is an illustration par excellence: it is an emblem (a brand) and a network (an emblem-centred network) that embraces design companies, shoe factories in places such as India or the south of Brazil (that produce according to contracts), shipping companies, shops, advertisement agencies, etc. Within this network there are many interconnected flows5— that are directed and controlled from the centre. This centre also appropriates the value generated within and throughout this network. The point is that this network is, as it were, non-material. Its primary elements are not material ones. It primarily consists of an emblem (and the associated rights) and control over flows. In the not too distant past power and control were grounded and dependent on material elements (such as the factory, the hacienda, the railway company, etc.). Today power is grounded in control over flows—and through this control material resources are also controlled.

Imperial networks typically grow through take-overs. There hardly is any organic growth (based on the production of profits that are re-invested in order to expand the enterprise). Expansion and growth occur through the use of another flow: credit.

Extractivism might be (loosely) defined as seeking to extract as much as possible of a resource that is in high-demand, for a minimal cost, in as short a time as possible. A central feature of extractivism is constructing spatial relations that link places of poverty (where 'costs are as low as possible') to spaces of richness (where 'high-demand' is located and where prices are high). This gives rise to activities such as cultivating asparagus in the Peruvian Costa to sell in the USA and the EU (Ploeg, 2008, chapter 3). Or using cheap Chinese labour in order to produce the electronic gadgets so in demand in the global North. But imperial networks do not only *link* already-existing spaces of poverty to spaces of richness; they also *create* new spaces of poverty. Here the centrality of liberalized international trade comes to the fore. It is through the world market, dominated by large commercial and financial empires⁶, that price levels are 'shifted' from the spaces showing the lowest possible cost levels to potentially all other places of production – wherever located. If an internationally operating network, such as Parmalat, is able to obtain unprocessed milk in the Ukraine and/or Poland and then process and sell it as 'fresh milk' in Italy, this will inevitably exert a strong downward pressure on farm-gate milk prices in Italy (see Ploeg, 2008, chapter 4). In this way new spaces of poverty are actively created.

What applies to extractivist networks that centre on mining (Veltmeyer, nd; Veltmeyer and Petras, 2014), equally applies to extractivist networks that centre on food processing and trading (Ploeg, 2008). They are *void* (their debts often are higher than their assets). They do *not contribute anything new* (already existing resources are taken over and combined, already existing technologies are applied, etc.), they do *not produce value* – they just extract ('drain') value that is produced by others or laying dormant in the subsoil and they do so through the application of extra-economic power and/or financialisation.

Capital increasingly operates through extractivist networks that *appropriate* value produced elsewhere (they do not *add* value). This applies to mining, but increasingly to other realms of the deregulated economies of today as well. A consequence of this thesis is that the BRICS countries are *not* involved in a trajectory that promises to bring them to the state of fully fledged ('developed') capitalist economies. It is not that they are coming closer and closer to the economies of e.g. the USA and the EU. It is the other way around: they are expressing a stage to which the so called developed countries (again, the USA, EU. etc.) will begin to move as well, if anything, BRICS are *ahead* of the rest in as far as extractivism is concerned, far ahead.

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⁵ Consequently, other flows are excluded and do not occur.

⁶ Thirty five percent of all international trade takes place within transnational companies, e.g. Cargill Brazil selling soy to Cargill Europe.

2 BRICS and extractivism

Extractivism can be grounded on a variety of resources and relations. In China it centres on the availability of a huge reservoir of cheap and disciplined labour that is accessible to foreign and national capital, constituting a 'global factory' that delivers high value products, at the cheapest possible price, to be sold in the Global North. In Brazil it is centred around iron ore, soy, sugar, ethanol and the promise of large oil reserves. In South Africa it is again a combination of minerals and agricultural products: gold, diamonds, coal, wine, meat and other agricultural products. In Russia it resides mainly in gas, oil and in making large tracts of agricultural land available to foreign investors.

Today, the *cerrado* belt in the heart of Brazil is one of South America's most dynamic agricultural regions. The export-oriented agricultural boom (that predominantly, but not exclusively, centres on soy) is a relatively recent phenomenon. The *cerrado* was long known as a forbidding and mysterious land whose intractable vegetation (known as 'mato grosso', which means 'dense bush') hid vast wealth – including, in some versions of the El Dorado myth, the 'City of Gold'. There have been many attempts to unlock this 'hidden' wealth. However, it was only the large scale extractivism that emerged from the 1970s onwards that turned out to be successful. The soya frontier pushed cattle-ranching towards the margins, savannah and forest conversion accelerated, leading to the displacement of the region's indigenous peoples and smallholders. The *cerrado* is now dominated by highly mechanized large farms employing relatively few workers (Cabral and Shankland, n.d.:13). Draining away 'hidden wealth' is a telling metaphor for extractivism – a metaphor that indirectly indicates that extractivism does not *produce* wealth, it explores the world for already existing, but still 'hidden' wealth and then exploits it till it is finished.

One of the most intriguing elements of BRICS countries is that their economies are heavily based on extractivism and, at the same time, they *export* the extractivist model to other countries in order to 'drain' those economies. Some examples include the massive investments in land located in Africa and Eastern Europe by China, or the 'import' of Burmese and Vietnamese workers who are even cheaper than Chinese workers. The same applies for South Africa which massively invests elsewhere in Africa (mainly but not only in the form of land-grabbing) and Brazil which 'exports' its large-scale soy bean farmers to Uruguay, Paraguay and parts of Argentina and is starting to control large tracts of land in Mozambique and Angola. To put it bluntly: BRICS countries are draining themselves, are drained by others and now seek to drain yet another echelon of countries (all this makes for highly complex, and sometimes contradictory, politico-economic constellations and geo-political alliances).

The only possible explanation (of this three-tier constellation) is that extractivism is not just an additional element of the BRICS' economies, but constitutes their very core. The profits resulting from extractivism are *not* invested in building new productive capacities – there is no accumulation that results in a wider industrial development. Rather than generating processes of self-sustained growth, these countries export the extractivist model elsewhere. From an extractivist perspective direct investments in the domestic economy (take-overs aside) are not interesting. It is *more* profitable to *extend* extractivist activities into new, as yet 'virgin' areas. Once the original and the exported forms of extractivism become extremely profitable, they might then be colonized by third and external manifestations of extractivism.

The Vale company is involved in a multiplicity of extractive activities in Brazil and is now one of the main land grabbers in Mozambique. EMBRAPA (the Brazilian state agency responsible for agricultural R&D) has shifted a considerable part of its activities to Africa, especially Lusophone Africa. Brazil and China together are emerging as powers in trading and processing agricultural commodities in Zimbabwe. In addition 'a private investment firm, Green Fuels, has set up a US\$ 600 million ethanol processing plant in Chisumbanje, South East Zimbabwe, as a joint venture with the Agricultural and Rural Development Authority, a quasi-state institution on whose estate the plant is located [....] The Brazilian private sector provided the expertise in building the plant [...] Sugarcane is supplied

primarily by the estate and is supplemented through out-grower arrangements with surrounding communal farmers' (Mukwereza, n.d.: 8).

In the meantime Brazil, Japan and Mozambique have developed a triangular partnership called ProSavana. This programme, led by EMBRAPA on the Brazilian side, will try to repeat the *cerrado* transformation in the north of Mozambique. It claims to envisage providing support for both commercial large-scale agriculture and smallholder 'subsistence' farms (Cabral and Shankland, n.d.:16).

Extractivism assumes access to the resources that are to be exploited and this access can be direct or indirect. Large mining companies may establish direct ownership over areas containing the valuable minerals, but they may equally acquire these minerals from local bosses who organize extraction locally and sell the minerals for low prices. All this evidently depends on the interactions between global markets and local circumstances (prices, the ability to control, the ability to build and maintain monopolistic positions, the images involved, etc.). In the case of agricultural land there are further dimensions: speculation and the pursuit of anti-inflationary policies. These have a specific relevance when considering the similarities between extractivism in general and land grabbing in particular.

Land grabbing gives capital groups far more control than when they have to engage in ongoing negotiations with (possibly unwilling) local producers. When these local producers are semi-subsistence peasants or nomadic herders or slash-and-burn farmers (or, ironically, incompetent state-agencies or tired landlords) it is relative easy to claim that 'these lands are empty; that there is nobody here', and to organize a massive shift in land-tenure. This establishes direct control, the basis for establishing extractivist forms of agriculture (or forestry). This process is more intense when there are fears about inflation: investment in land then turns into a much more interesting speculation (especially when prices of agricultural products are booming).

3 Responses

We can also discern some clear countertendencies within economies that are shaped by extractivist activities. These countertendencies are expressions of resistance to the growing hegemony of imperial networks and their appropriation of value. Some of these countertendencies can be found in the endeavours of progressive governments (especially in Latin America) to re-structure their economies so they are less dependent. Countertendencies can also be encountered at lower levels of aggregation. In a way, the 'informal economic sectors' that abound in many cities of the Global South (but which can now also be found in the Global North where the phenomenon of self-employed workers has been rapidly growing) can be understood as representative of ever so many countertendencies⁷. These emerge out of the struggle of people (sometimes individually, sometimes collectively) to construct what the dominant economic system does not provide them with: a minimum income, the basis of a livelihood and some sparks of hope. This is occurring in both the cities and in the countryside⁸ and it involves both production and circulation. Autonomy, self-controlled resource bases, self-provisioning and direct linkages between producers and consumers (all of which allow people to 'by-pass' the imperial networks), are key features (Pickerill and Chatterton, 2006). Where such alternative

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⁷ Informal economies are those segments of the economy that are geared towards producing a living (analytically speaking these economic activities are oriented at the production of labour income – not at the production of surplus value).

⁸ For a range of material reasons, agriculture and food production are arenas that are very amenable for the emergence of such countertendencies. This turns agriculture and food into one of the main arenas where labour and capital are engaged in multiple struggles. The construction of spaces where a labour income might be produced *versus* the appropriation of the 'hidden wealth' is the concrete expression here of capital-labour relations. The encounter between the two is the current form of class struggle.

economies emerge out of social struggles (like the ones headed by the MST in Brazil), reference is often made to 'economies of opposition'.

Thus we are seeing the emergence (probably more than ever before) of differently structured economies. At the level of the 'real economy' one finds large corporations, state enterprises, small and medium enterprises, individual producers (sometimes organized in cooperatives), etc. In the countryside peasant agriculture exists alongside entrepreneurial and corporate agriculture (Ploeg and Ye, 2016). The dynamics, impact and structuration of these productive processes differ and there are remarkable contrasts in the way these different forms relate to the markets. On top of the 'real economy' we have extractive activities and the world of international finance. Taken together this creates a matrix with many different possibilities (e.g. more or less independent peasantries and peasantries exploited by strongly extractivist systems as well as peasantries who have been moved to the margins through wide-spread land grabbing).

We believe it is important to compare and analyze these different (and interlinked) economic systems and to develop a theoretical understanding of their co-existence and interactions. We will pay special attention to expolary economies ('expolary' because they are neither 'market' nor 'state'). Expolary economies are not simply found somewhere 'in between' corporate capitalism and state-planned economies. 'Such a scale itself is a falsity' (Shanin, 1990: 90). Neither are they simple 'remnants of the past'. They are actively being reproduced, and sometimes, created anew. Above all, expolary economies are distinctively different. They are driven by a different logic and the need to survive and/or to create what capital (and/or state) does not deliver. They have a different impact and a specific meaning to those involved. A clear theory of such expolary economies is much needed, not least because it might help strengthen the social movements that are seeking to construct new and solid responses to extractivism.

By discussing a few examples, the following section aims to highlight that differently structured economic systems do indeed have different dynamics and different impacts.

4 A micro-level example

Liucun is a village that is located in China. It is like thousands of other villages in China or, for that matter, in South America or Africa. There is agricultural activity and a range of supplementary economic activities. Some of the population is engaged in labour migration and there is considerable mining activity. This started some 20 years ago and has passed through different stages.

First there was the mining of iron ore. This is extracted from rocks that are excavated from the surrounding mountains, but it is also found in sandy layers in the subsoil of the valley, that is, underneath the agricultural fields (and mostly at a depth of between 2 and 6 metres). Evidently, the extraction of the sand containing iron ore ruins the fields (at least temporarily). The fields might be restored: this is normally part of the informal contract established between peasants and the 'bosses' who represent the companies organizing the iron ore extraction (these contracts also include a cash payment), but often the bosses disappear or go bankrupt and the restoration does not occur. Whatever the case, the sand containing the iron ore is transported to a local 'iron factory' where iron ore is literally washed out of the sand and caught by a huge electromagnet. What this leaves, apart from the purified iron ore, is a highly contaminated river and a huge mountain of sterilized and slowly drying quicksand.

This mining of iron ore is often accompanied, or followed, by the mining of sand. Additional layers are excavated and the sand is filtered and sold to be used in urban building activities and/or for highway construction. Part of the sand is also used for brick making. There is now a small factory for this in the village. Thirdly, stones are collected and/or extracted and crushed (using powerful machinery) to be sold also to the construction industry.

A fourth stage brings us back to the sterilized sand that has accumulated alongside the 'iron factory' which was never brought back to the fields due to the disappearance or bankruptcy of the bosses. This dried sand is now sold to other bosses involved in the 'reconstruction of the riverbed' (badly damaged through the earlier rounds of mining). This new 'reconstruction project' is funded by regional state agencies.

In the meantime, other bosses start talking about a fifth stage that aims to convert several of the 'recovered' fields into fishponds or recreational parks. If this were to occur the fields would no longer play any role in agricultural activities and would also definitely be separated from the rural economy.

This sequence shows that mining is far from a one-off activity. This form of extractivism is an *ongoing* process that repeatedly creates new opportunities for its own continuation. At the same time it is clear that extractivism involves more than just extraction. It also involves a complex series of transactions involving land rights, transport, factories, labour, energy, knowledge, machinery, legal permissions, environmental problems, subsidies and political support.

Within *Liucun* village there are different factions that have been, and are, competing for control over different resources. The elections for the Village Committee (especially between 2003 and 2010) mainly hinged around this struggle.

Mining interacts with agriculture in different ways. It takes agricultural fields out of production – for longer or shorter periods. But it also introduces extra money into the peasant economy – which might be used for productive investments. Thus, potentially there are both negative and positive effects. Whether, and to what, degree these occur and especially, how they will interact and what the net balance will be cannot be assessed beforehand. This will depend on many factors, that are filtered through the prism of 'local politics' (understood here as peasant strategies, the interventions of bosses, local elections and local struggles between different factions, etc.). However, there are clear differences between the dynamics of mining and the dynamics of the local peasant economy. Mining follows the logic of extraction (it 'takes value away') and any investments that are made are solely to allow extraction. In the peasant economy many investments occur (also in the form of 'labour investments') which aim at the *production of new value*. They contribute value, instead of just draining it away. This is not to say that extractive activities necessarily come from the 'outside' or that the creation of new values is essentially driven from the 'inside'. There is no such simple dichotomy ¹⁰. As a matter of fact, the mining in *Liucun* village has several 'internal' drivers (who are linked also to outside forces).

Table 1 summarizes the contrasting features of extractive and productive cycles as exemplified by the mining activities described above and the peasant production that exists alongside these mining activities.

Table 1: Contrasting features of different economic systems in village X.

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⁹ For an extended discussion see van der Ploeg and Ye, 2016, especially chapter 4.

¹⁰ Power relations should not necessarily be seen as asymmetrical. Timothy Mitchell's study of Egypt and the 'Rule of Experts' (2002) stresses the need for 'thinking of power as something *local* in construction'. The essence of his argument is that '[although power is] drawing upon and shaped by larger logics, [it is] built out of the practical relations between farmers and laborers, landowners and middlemen, bureaucrats and merchants, men and women. The fields [or more generally: the spaces of production] that villagers own or rent, labor in or supervise, sell or seize control of, are the crucial sites for constructing and contesting rural power relations'. Mitchell underlines the need to reintroduce the spaces of production, or 'the fields' as he calls them into the analysis. 'Seen from the perspective of the fields [....] the state becomes a [...] complex set of relations. These no longer appear primarily in the form of a central power intervening to initiate change, but as *local* practices of regulation, policing and coercion that [....] are themselves a site of struggle and reversal' (2002:167-8; italics added).

Extractive systems (as exemplified by mining)	Productive systems (as exemplified by peasant agriculture)
Exhausts resources	Develops and improves resources
Drains value	Produces value
Occurs through the production (and unequal appropriation) of surplus-value	Occurs through the production of labour-income
Tends to be exclusive	Tends to be inclusive
'Consumes' and destroys places	Reproduces and develops places
Concentrates wealth	Distributes wealth more widely
Produces large amounts of losses and leaves a lot of waste behind	Tends to re-utilize remnants
Consumes large amounts of fossil fuels	Tends to economize on fossil fuels
Occurs in 'darkness' 11	Transparent
Limited time-span (due to resource exhaustion)	Far longer time horizon, progressive

The features summarized in the left column of Table 1 describe *capital*'s relationship with the countryside: it drains resources, taking them away without returning anything substantial. It impoverishes places. Equally the right column informs us about possible countertendencies: it shows how *labour* (here represented by peasants) can create the foundations for self-sustained and ongoing growth.

This shows that, even at the level of a single village, we can find a highly diversified and complex economy in which different economic models (exemplified here by extractivist mining and peasant agriculture)¹² co-exist alongside each other. This echoes Chayanov's observation that: 'we must take as an unquestionable fact that our present capitalist form of economy represents only *one* particular instance of economic life' (1966:24). This implies that 'the validity of the scientific discipline of national economics [...] based on the capitalist form [...] cannot and should not be extended to other organizational forms of economic life' (ibid.). They require their own, specific, theorization.

Of course, the co-existence of differently structured economic systems does not imply that some of them (e.g. peasant agriculture) are 'outside' capitalism. What is important here is the interrelations that can vary from subordination and dependency to relative autonomy and symbiosis – or for that matter from draining, being drained to resisting drainage. Such interrelations are historically contingent, and are partly shaped by different class relations and different forms of class struggle.

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¹¹ Several villagers are highly upset about mining, the unequal distribution of profits and the role of the Village Committee. They often summarize the last aspect by using the denunciative term: hei àn. Literally this translates as 'darkness in the village'.

¹² In 'Expolary Economies: A Political Economy of Margins', Shanin discussed a far wider range of such models: the family production unit; the small specialized unit (based on skills); the interfamilial reproduction of labour; the 'second' economy (that operates as supernumerary source of income through the use of one's free time); the black economy, etc. (1990: 91-92).

Thus, for example, from the peasant emancipation (1861) to the Revolution of 1917, the peasant family farm existed in Russian agriculture alongside capitalist large-scale enterprise. This led to the destruction of capitalism because the peasants, relatively short of land, paid more for the land than the capitalized rent in capitalist agriculture. This inevitably led to the sale of large landed property to the peasants. Conversely, the high ground rent achieved by the large capitalist sheep farm in eighteenth-century England caused the plundering of peasant tenancies, which were not able to pay the same high rent to the estate owners (Chayanov, 1966: 28).

This analysis led Chayanov to draw an important conclusion: 'These as well as a number of analogous examples remove any doubt about the preeminent importance of the *problem of coexistence among different economic systems*' (Chayanov, 1966: 28, italics added). We consider this problem to be central to the study of extractivism (and more specifically to the study of BRICS countries). This is not just because extractivism is about particular economic systems that drain other economic systems, but also because extractivism generates new economic systems (of the 'expolary type') that seek to resist this draining.

5 Conquering parts of the economy: a meso-level example

Catacaos is a large peasant community located in the north of Peru. At the dawn of the 1969 Agrarian Reform it exhibited, like many other areas throughout Latin America, the typical socio-economic structure that could be described, using today's language, as extractivist. Land was monopolized in large *haciendas* (corporate farms) created during two consecutive waves of land-grabs as we would now call them. Cotton was the main crop which was mainly exported and processed elsewhere. The profits obtained were mainly invested in the urban economy (industry, trade, construction and speculation). Widespread unemployment, low income levels and a lack of prospects seemed to be the unavoidable fate of the *comuneros*.

During the upheavals that accompanied land reform the community of Catacaos (which had already been engaged in various forms of social struggle and resistance) developed a robust response to the prevailing extractivist structures and to the Agrarian Reform that appeared to perpetuate (if not intensify) several features of the extractivist model (Ploeg, 2006). This response, which materialized in the 1969-1978 period, had a number of intriguing elements, listed below.

Land was taken over by the community (through an avalanche of invasions) and production was reorganized through a long, complex and progressively proceeding process. The main ordering principles were to create as much employment as possible and to strengthen the regional rural economy. This was in stark contrast to the previous ordering principles, which were to maximize the rate of return on invested capital and to channel as much value as possible to outside destinations.

In technical terms this shifted the pattern of agricultural development towards labour driven intensification. Yields increased considerably due to an increase in both the quantity and the quality of labour. At the same time, cost levels were reduced (one factor here was that the community bluntly refused to pay the so called 'agrarian debt'). Thus, 'collective labour income' was greatly enlarged.

In organizational terms the newly constructed and self-governing units of production (*unidades comunales de producción*) played a central role. They allowed for, and encouraged, labour-driven intensification and functioned as the main line of defence in the wider socio-political struggles that the community was engaged in.

Politically speaking the formation of the communal units of production and the unity with which the community confronted state agencies, banks and trading companies were due to the enormous capacity of the community to mobilize its people and to create alliances with other social forces. Political mobilization propelled economic change and the newly-constructed economic constellations spurred

further political struggle. Economic and political power became increasingly aligned and this gave extra momentum to the ongoing struggles.

From a politico-economic point of view there was a major transition in the value flows and their underlying dynamics. Instead of being oriented at (and structured by) externally defined objectives (accumulation in the urban economy), resource use (or more generally: the organization of the regional economy) was now oriented towards the socio-economic needs of the community. Creating productive employment that could generate incomes and providing health services and education became the main aims. This is illustrated in Figure 1 which shows how the community operated as the carrier for making the required orientation of production to meet socio-economic needs.

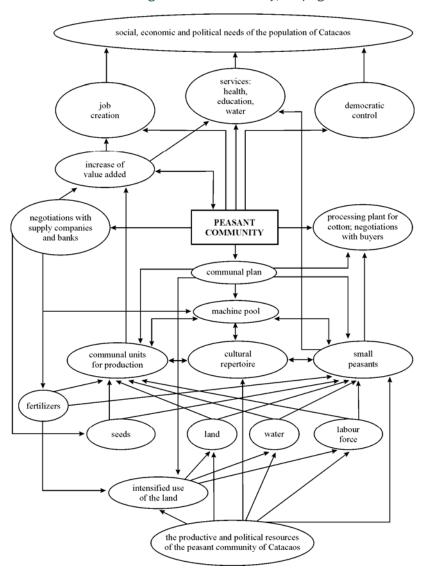


Figure 1: Linking the utilization of resources to socio-economic needs (Catacaos, Peru).

Source: van der Ploeg, 2008

The transformation of agricultural production, rural economy and town-countryside relations that were achieved by the peasant community of Catacaos have similar characteristics to the transformations in other places where rural struggle and change occurred 13 (one could even argue that such features have been strategic in urban class struggles such as in Italy). Such transformations repeatedly involve changing the concrete economy from a profit-maximizing exercise to a constellation that optimizes societal objectives such as high employment, good remuneration, sustainability, social welfare, etc. This creates a particular expolary economy. Expolary, because it is neither state-controlled, nor governed by the logic of the market¹⁴. Instead, economic life, i.e. the use of available resources, is restructured so as to align it as much as possible with the expressed socio-economic needs of the population (especially those of the poorest strata). In this respect, the introduction of self-government

¹³ A notable experience is the Portuguese land reform episode in the Alentejo area in the years that followed the Carnation Revolution.

¹⁴ This also applied in an immediate sense. The newly created Communal Units of Production (and their governance structure) differed radically from both the state-controlled cooperatives and the former (marketgoverned) haciendas (see Ploeg, 2006).

within the sphere of the economy was strategic - as were the principles of autonomy and selfemployment and the definition of resources as non-capital goods¹⁵.

The effort to conquer, and reorganize, growing parts of the economy is not utopian. As demonstrated by the community of Catacaos (and in many other instances) it is possible to create new politico-economic constellations – and these in turn can further encourage political mobilization. At the same time we should not forget that such processes can also be reversed (as occurred in the years that followed).

The Fujimori regime introduced the harshest forms of neo-liberal market regimes into Peru and deactivated popular organizations under the guise of anti-terrorist measures. The community of Catacaos lost momentum: the once-strong communal organization of production and distribution (see Figure 1) eroded and the socio-political ties that bound resource use and socio-economic needs together faded away. This eventually resulted in a situation of *disconnectedness* (see Figure 2) which allowed for the reconstruction of new, extractivist models (see Figure 3).

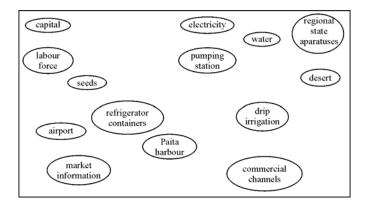


Figure 2: Disconnected resources

Source: van der Ploeg, 2008

2002 van der 1100g, 2000

The model sketched in Figure 3 represents extractivism *par excellence*. The differences between the pattern outlined in Figure 1 and that entailed in Figure 3 highlight the enormous contrasts between extractivism and the expolary economy.¹⁶

¹⁵ Strictly speaking resources (instruments, objects of labour) only function as capital if they are combined with wage labour and used to produce surplus-value that is re-invested in order to produce more surplus-value. That is to say, capital is a relationship, not a thing. Resources (land, water, seeds, animals, technologies etc.) might very well be utilized through, say, self-employment (structurally different from wage labour), they might be owned by the worker (it is his or her patrimony or self-controlled resource base) and, finally, they might be used to produce value(s) that differ from surplus-value. In this case we are talking about non-capital goods (or resources). These are a critical element of expolary economies. The distinction between capital and non-capital goods represents a gradient (in practice it depends on many factors including credit relations, labour driven investments, the historical trajectory of the productive unit, etc.)

¹⁶ The same applies to the left and right columns of Table 1.

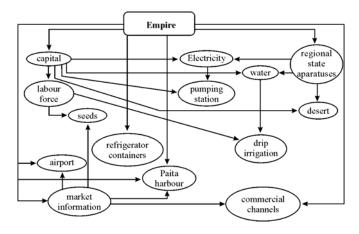


Figure 3: Modelling the world in an extractivist way

Source: van der Ploeg, 2008

6 Alternative-oriented struggles

Expolary economies are not just the outcome of social struggles – they are just as much the *embodiment* of such struggles. More precisely, expolary economies result from, and represent, alternative-oriented struggles (also referred to as struggles of 'the third kind') which, as Table 2 shows, differ from other forms of struggle

Table 2: Struggles of the 1st, 2nd and 3rd kind

	Relation to labour process	Where does it take place	Nature of struggle	Objectives
Struggles of the 1st kind (advocacy)	untouched; aimed at obtaining better conditions	outside place of production	overt	conditions related with sale of labour force (circulation)
Struggles of the 2nd kind (Everyday)	slowing down; labour process as such unaltered	inside	covert	sabotaging production (production)
Struggles of the 3rd kind (alternative- oriented)	getting control over labour process; transforming it	inside	overt/covert (and, as yet, not well understood)	transforming both production and circulation

Struggles of the first kind involve questioning the distribution of wealth among those participating in the capitalist system of production (workers, management, capital owners). Such struggles are mostly overt and can involve strikes, demonstrations, road blocks, slow-downs, etc. Struggles of the first kind do not question the *organization* of production: they are focused on the distribution of the produced wealth. They are, typically, located outside the place of production. During a strike the doors of the factory are blocked. Struggles of the second kind are covert rather than covert. They represent the hidden and camouflaged resistance masterfully described by James Scott in 'Weapons of the weak' (1985).

Alongside these two types of struggle there are other, more comprehensive and probably far more important, fields of action through which resistance materializes. These fields of action are located within spaces of production. In the 1930s and then in the 1960s and 1970s Europe witnessed a wide range of urban expressions of this, which were theoretically elaborated in the Italian operaismo tradition¹⁷. Such forms of resistance actively seek to alter the techno-institutional structures of labour and production processes¹⁸. Routines, rhythms, patterns of cooperation, sequences, machines, their tuning and the mix of materials used, can all be altered in order to improve labour and production processes and align them with the interests, prospects and experiences of the workers involved¹⁹. The experience of the community of Catacaos, discussed above, is exemplary for struggles of the third kind. The essence of the Catacaos experience and, indeed, most struggles of the third kind, are aptly summarized on a banner hanging in a MST settlement in Brazil, shown in figure 4. It reads ocupations (seize parts of the economy), resistance (avoid delocalization and obtain the requisite rights and access to different networks), production (in a way that differs from hegemonic schemes) and cooperation (build alliances with similar groups and elaborate comprehensive strategies for change).



Figure 4: A political banner hanging in a MST settlement in Brazil

The central point that we want to make is that the third form of resistance – direct intervention in, and the alteration of, the processes of labour and production – is widespread in today's agriculture. It can be found in the agro-ecological movement, in the creation of new family farms in Brazil, and is also the main driver of the many forms of endogenous rural development that we are witnessing in Europe. Resistance occurs through a wide range of heterogeneous and increasingly interlinked *practices* through which the peasantry constitutes itself as *distinctively different*. Resistance resides in the fields, in the ways in which 'good manure' is made, 'noble cows' are bred, 'beautiful farms' are constructed, and 'fresh milk' is delivered (Ploeg, 2008). It resides in the sturdy endeavours to produce two spikes of grain where before only one spike was harvested (Chayanov, 1988:115). As ancient and irrelevant as such practices may seem when considered in isolation, in the current context they are increasingly

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¹⁷ Control over the labour process was *de facto* expropriated by management (Braverman, 1974) not only in industry but increasingly in agriculture as well (Benvenuti, *et al*, 1988). Social struggles moved from the shop floor to places outside the farm and the factory where labour conditions (instead of labour content and methods) were negotiated (Mok, 1999, analyzed this as an exchange with control over the labour process exchanged for improved labour conditions). Today a basic realignment is materializing. The degradation of work and the precariousness of labour conditions – both increasingly driven through and by the Empire-like restructuring of many spaces of production – are triggering new forms of resistance, especially of the third kind. Thus, control over the labour process is being reconquered.

¹⁸ In the Marxist tradition, especially due to the legacy of Leninism, material alterations that aimed for or were created through resistance were understood as belonging to the muddy (and theoretically impossible) field of reformism: 'real' modifications could only be wrought, it was thought, after power had been seized.

¹⁹ It can be argued, in more general terms, that the *informal networks* that exist on the shop floor are another, albeit less militant, but probably more continuous, expression of such resistance.

vehicles for expressing and organizing resistance. Resistance also resides in the creation of new peasant units of production and consumption in fields that would otherwise lie barren or be used for the large scale production of export crops. Resistance resides in the *multitude of alterations* (or actively constructed responses) that have been continued and/or created anew in order to confront the modes of ordering that currently dominate our societies²⁰.

Expolary economies also tackle another important social mechanism: they induce the capacity to appropriate the added value which is generated when products or services enter the sphere of circulation. Thus the capacity to generate a 'labour income' (as Chayanov would argue), becomes a social or collective good that brings benefits for extended groups of people. In this sense expolary economies tend to generate wider benefits that encompass a process in which social groups are able to take advantage from individual activities.

Another important feature of the new forms of resistance is that they entail searches for, and constructions of, *local* solutions to global problems. Blueprints are avoided²¹. This results in a rich repertoire and this means the heterogeneity of the many responses becomes one of the propelling forces that induce new learning processes.

This pattern reflects the new relations that currently reign in many parts of the world: direct confrontations are increasingly impossible, if not counterproductive, and global solutions are deeply distrusted. Hence, the new responses follow a different road:

Resistance is no longer a form of reaction but a form of production and action [....]. Resistance is no longer one of factory workers; it is a completely new resistance based on innovativeness [...] and on autonomous co-operation between producing [and consuming] subjects. It is the capacity to develop new, constitutive potentialities that go beyond reigning forms of domination' (Negri, 2006: 54).

We think this a good description of the multitude of responses involved. Alternative-oriented resistance is difficult to capture. As it emerges at the many cracks (or interstices) characterizing today's world (Holloway, 2002), it is everywhere and it takes multiple forms and is often inspiring, relinking people, activities and prospects. It provides a constant flux of, often unexpected, expressions that, time and again, flow over the limitations imposed by the dominant modes of ordering. Each and every form is an expression of critique and rebellion, a deviation that articulates superiority. Individually these expressions appear innocent and harmless: considered together they become powerful and have the ability to change the panorama.

7 Tackling the markets

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When discussing the co-existence of different economic systems, Chayanov observed that 'each system [will] communicate with the others... This contact usually occurred on the plane of commodity and land market prices' (1966:27). The 'market' has been a powerful argument in discussions that tend to play down the politico-economic impact of struggles of the third kind and the new, expolary, systems they create. If 'the market' represents capitalism (or if the market is controlled by major capital groups) expolary economies, it is assumed, cannot escape the narrow margins of autarchy. They will always be subordinate to 'the market'.

It will be clear, we hope, that the concept used here, 'multitude of responses', is meant as a critique of Hardt and Negri (2002) whose use of the term 'multitude' is basically void and without intentionality. Here we distance our analysis from their highly abstract concept of 'multitude' which is as depersonalized as 'class' was in many historical analyses. In contrast, our use of 'multitude of responses' refers to specific fields of activities in which concrete responses are developed; and to the real social actors who create, develop and implement these responses.

²¹ This contrasts strongly with the previous modernization epoch in which, as Bauman has signalled, essentially local problems were countered with global solutions.

We believe that such reasoning is invalid. Rather than engaging in a probably fruitless ideological debate, we prefer to point to a new and unmistakable trend occurring in today's alternative-oriented struggles. They increasingly start to re-pattern the sphere of circulation as well. We refer here to the now well-documented experiences of farmers' markets, peasant markets, public procurement schemes, community supported agriculture, box schemes, etc. (see for a general discussion Ploeg, Ye and Schneider, 2012).

Using the key questions of politico-economic analysis (Bernstein, 2010), Table 5 summarizes the major differences between the currently dominant markets for food and agricultural products (often corporate-controlled markets) and newly constructed markets. This table shows that major differences are being forged²². This gives the differently patterned economic systems a major boost – and a new line of defence. Thus, to echo Shanin (1990: 90), 'the social economy of the off-scene, its capacity to survive, its internal logic and its overall impact' are strengthened further. It is therefore important that the possibility of new expolary economies as a response to extractivism are 'brought into the field of vision' (ibid.)

Table 3: A comparison of general and newly emerging markets for food

	General agricultural and food markets	Newly emerging markets
Who owns what?	Most linkages between production, processing, distribution and consumption of food are controlled by food empires	Short circuits are interlinking the production and consumption of food. These short circuits are owned or co-owned by farmers
Who does what?	The roles of farmers is limited to the delivery of raw materials for the food industry	The role of farmers is extended to embrace on-farm processing, direct selling and the redesign of production processes that better meet consumer expectations
Who gets what?	The distribution of Value Added is highly skewed; most wealth is accumulated in food empires	Farmers get a far higher share of the total Value Added
What is done with the surpluses?	Accumulated wealth is used to finance the ongoing imperial conquest (take-over of other enterprises, etc.)	Extra income is used to increase the resilience of food production, to strengthen multifunctional farming and to improve livelihoods

²² Indeed, "[t]here is growing evidence that societal systems of political economy which are more complex and contradictory [i.e. expolary economies] prove more effective in so far as the wellbeing of the population, the functioning of the national economies and their 'growth' are concerned' (Shanin, 1980: 89).

8 Moving to the macro level

The discussions of economic alternatives so far have focused on the micro- and meso-level. The critical question that evidently comes to the fore is whether or not it is possible to forge alternatives at the macro-level (i.e. at the level of economic sectors directly linked to the world market and/or the nation state operating in the current globalized context). More specifically: are there alternatives to the types of extractivism that now dominate the economies of the BRICS countries (see also Gudynas, 2013)?

To give answers, even partial ones, to such questions is clearly beyond the scope of this paper (or its authors' prowess). Nonetheless, these questions need raising because they might well indicate lines for new, critical, research that can build upon, and strengthen, today's social movements. They can help us to understand the urgency and relevance of exploring the structure, dynamics and limitations of the new expolary economies that are being constructed as a response to imposed extractivist models. They can also help us to theorize the construction of such new expolary economies as part and parcel, if not as the newest and most promising form, of today's class struggle.

In terms of sectoral economic activities (i.e. mining or soy bean production) it is clearly the case that there is not one single model (i.e. the extractivist model) that is applied as a way of successfully organizing economic sectors. In his convincing comparison of two provinces in the south-west of China, Donaldson describes two types of mining. One large-scale type is characterized by large capital groups and the use of capital-intensive technologies – this type of mining dominates in Yunnan. The other model, found in the neighbouring province of Guizhou is small-scale. Here, the mining is controlled by small and medium enterprises (mainly national capital) and labour-intensive technologies are applied (which also goes together with a higher rate of labour accidents and a higher rate of mortality)²³. Similar differences were found in infrastructural works (highways as opposed to improving countryside roads), tourism (luxury hotels for international tourists as opposed to agrotourism) and migration (low as opposed to high). These comparisons show, firstly, that economic sectors can and are patterned in different, even contrasting ways. Secondly, Donaldson shows that politics are decisive in this respect. Thirdly, the analysis shows, in a meticulous way, that the more extractivist and outward-oriented model of Yunnan generates a higher rate of economic growth. However, this was not accompanied by any poverty alleviation. Instead, the numbers of poor increased considerably 24: 'Economic expansion in Yunnan left a higher proportion of its people poor' (Donaldson, 2011:6). On the other hand, in the differently patterned economy of Guizhou where economic growth was lower the rate of poverty alleviation was far superior to that in Yunnan: in Guizhou the number of very poor people was reduced by 2.4 million, in Yunnan the ranks of the very poor grew by 2.2 million.

The way an economy is patterned matters very much, especially to the lives of poor people. The construction (or destruction) of employment, the generation of incomes, poverty alleviation, sustainability etc. are all affected (or can be affected) by policies. What is decisive here is whether these policies favour extractivism or facilitate the construction of alternatives. This can be applied to mining (as shown by Donaldson) but also to soy bean cultivation (see e.g. Vennet *et al.*, 2016) or any other economic activity.

To move from economic sectors to countries as a whole: the recent debates on Brazil are very informative. In an authoritative contribution, Perry Anderson suggests that if popular organizations

²³ Of course, labour-intensive mining does not necessarily equate with high levels of mortality. With appropriate policies and adapted R&D small-scale mining could be made safer. Rather than focussing on such solutions, national policies have increasingly tended to forbid small-scale mining – thus opening the doors for large-scale mining.

²⁴ This is in line with the findings elaborated in a careful analysis of extractivism in Latin America (Veltmeyer and Petras, 2014, see especially chapter 8).

and movements had been strengthened over the last 12 years (instead of being neutralized) things would have gone differently. In another important debate that regards the recent experiences of Ecuador, Bolivia and, to a degree, Venezuela, there is the question whether or not the wealth obtained directly and indirectly from extractivism might be used for more than just redistribution²⁵.

One thing is for sure. In countries with economies that contain broad and strong expolary economics the transition towards democratic forms of socialism should be easier than in countries where such expolary economies are weak or absent.

For radical studies (especially radical rural studies) this implies that the exploration of such expolary economies that emerge out of alternative-oriented struggles is a priority. We need to understand how such expolary economies are patterned, how they relate to the overarching capitalist context, how they develop (at least sometimes) into economies of opposition that further feed the social struggles out of which they are born. A clear articulation of these particular expolary economies will inspire and help to strengthen, we believe, the alternative-oriented struggles.

References

Anderson, Perry (2016), Crisis in Brazil, in: London Review of Books, 21 April 2016

Bauman, Z. (2004), Vite di Scarto [Wasted Lives; Modernity and its Outcasts], Edizione Laterza, Roma/Bari

Benvenuti, B., S. Antonello, C. De Roest, E. Sauda e J.D. van der Ploeg (1988), Produttore agricolo e potere; modernizzazione delle relazioni sociali ed economiche e fattori determinanti dell'imprenditorialita agricola,, CNR/IPRA, Roma

Bernstein, H. (2010), Class Dynamics of Agrarian Change, Fernwood, Halifax and Winnipeg

Braverman, H. (1974), Labor and monopoly capital: The degradation of work in the 20th century, Monthly Review Press, New York

Cabral, L. and A. Shankland (n.d.), Narratives of Brazil-Africa Cooperation for Agricultural Development: New Paradigms?, CBAA, Working Paper 051

Chayanov, A.V. (1966), On the theory of non-capitalist economic systems, pp 1-28, in: D. Thorner, B. Kerblay and R.E.F. Smith, A.V. Chayanov: The Theory of Peasant Economy, Richard D. Irwin, Homewood, Illinois

Chayanov, A.V. (1988 [1917]), L'economia di lavoro, scritti scelti, a cura di Fiorenzo Sperotto, Franco Angeli, INSOR

Donaldson, J.A. (2011), Small Works: Poverty and economic development in south-western China, Cornell University Press, Ithaca and London

Gudynas, E. (2013), Transitions to post-extractivism: directions, options, areas of action, pp. 165-188 in: Beyond development: alternative visions from Latin America, Permanent Working Group on Alternatives to Development, TNI, Amsterdam

Hardt, M. and A. Negri (2002), Empire, Van Gennep, Amsterdam

Holloway, J. (2002), Cambiar el mundo sin tomar el poder: el significado de la revolución hoy, El Viejo Topo, Madrid

Mitchell, T. (2002), Rule of Experts: Egypt, techno-politics, modernity, University of California Press, Berkeley Mok, A. L. (1999), Arbeid, bedrijf en maatschappij, EPN, Houten

Mukwereza, L. (n.d.), Chinese and Brazilian Cooperation with African Agriculture: the Case of Zimbabwe, CBAA, Working Paper 048

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²⁵ Interestingly, the main differences between the BRICS countries seem to reside in the use of the wealth obtained through extractivism. In Russia it is mostly captured by the oligarchs; in South Africa it enriches both the old and the new economic *elites*; in Brazil it is used, at least partly, for (social) redistribution; in China it is to a degree centralized in the State and used for infrastructural investments and the creation of an internal market. This last aspect implies a strengthening of peasant agriculture (from 2008 onwards the exchange relations between town and countryside have changed in favour of the latter).

- Negri, Antonio (2006), Movimenti nell'Impero, passagi e paesaggi, Rafaello Cortina Editore, Milano
- Pickerill, J. And P. Chatterton (2006), Notes towards autonomous geographies: creation, resistance and self-management as survival tacvtics, in: Progress in Human Geography, 30, 6, pp. 1-17
- Ploeg, J.D. van der (2006), El Futuro Robado: tierra, agua y lucha campesina, Instituto de Estudios Peruando (IEP), Lima
- Ploeg, J.D. van der (2008), The New Peasantries, Struggles for Autonomy and Sustainability in an Era of Empire and Globalization, Earthscan, London
- Ploeg, J.D. van der, Ye Jingzhong and S. Schneider (2012), Rural development through the construction of new, nested markets: comparative perspectives from China, Brazil and Europe, Journal of Peasant Studies, 39(1):133-73
- Ploeg, J.D. van der and Ye Jingzhong (2016), China's Peasant Agriculture and Rural Society: Changing Paradigms of Farming, Routledge, Oxon & New York
- Sauer, S., M. Balestro and S., Schneider (2015), The ambivalent and shaky stance of Brazil as a regional power in Latin America, unpublished dmanuscript
- Scott, James C. (1985), Weapons of the Weak: Everyday forms of peasant resistance, Yale University Press, New Haven and London
- Shanin, T. (1990), Defining Peasants, Essays concerning Rural Societies, Expolary Economies, and Learning from them in the Contemporary World, Basil Blackwell. Oxford
- Thiemann, L. (2106), The Third Class: Artisans within, besides and beyond the capitalist economy, Dissertation Design, ISS The Hague
- Veltmeyer, H. (....), Development at the Dusk of the Neoliberal Era
- Veltmeyer, H. (....), Agro-extractivism: the agrarian question of the 21st century
- Veltmeyer H. and J. Petras (2014), The new extractivism: a post-neoliberal development model or imperialism of the twenty-first century?
- Vennet, Bert Vander, Sergio Schneider & Joost Dessein (2016), Different farming styles behind the homogenous soy production in southern Brazil, in: The Journal of Peasant Studies, Volume 43, Issue 2, 2016, pp. 396-418

Agro-extractivism inside and outside BRICS: agrarian change and development trajectories

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