01 2012

The Resource Crisis and the Global Repercussions of Knowledge Economies

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The financial crisis has reverberated globally, making “the crisis” a household name from the most capitalized parts of the world to the so-called “developing” world. As capitalism has entered all spheres of life, so too has crisis. However, with finance capital, sub-prime lending and banks playing a dominant role in the crisis in the “developed” world, the reality behind those immaterial assets is a very real crisis of material resources and the subsequent loss of livelihoods worldwide. In order to understand financial crisis, it must be read in relation to the current phase of how global capitalism is adapting to and reinventing itself in the face of a limit to real material resources, such as fossil fuels, clean water or fertile soil.

With unlimited deregulation of markets and little consideration of its effects, the material resources which have not already approached their peak are beginning to,[1] ratifying a complex of financial cuts across the board as well as political and economic focus on the technology and innovation required for new methods of harnessing energy production, transport systems, food and water, all of which are to be supported and developed by the knowledge produced and protected in knowledge economy areas.

With not only Europe, the United States, Australia or the Maghreb[2] seeking to build competitive knowledge economies, the crisis is viewed as the cause and higher education areas the panacea to the "sickness" of crisis. These knowledge economies should address both sides of the crisis, sustaining financial and technological innovation for profit production on the one hand, and harnessing concrete resources and their correlated engineering on the other; formed and reformed under the banner of a "crisis in education."

Throughout modernity knowledge was an asset of the state, however, in contemporary relations it is becoming the asset of the supranational. On the one hand, universities play a significant role in producing profit through increasingly deregulated tuition fees that lead to student debt, as well as expansive austerity cuts that create competition across the board from individuals to departments, to institutes to universities, to city branding to national branding, to fueling supranational development. It is on the level of the latter, though, that a crisis beyond finance capital becomes visible. Europe's competitive knowledge economy area, the European Higher Education Area (EHEA), has established a space in which the Research and Technological Development (RTD) for the protection of innovation and resources becomes key in maintaining a stronghold both economically and politically. These policies justify the aggressive control of the movement of people and the innovation they may bring with them, with varying levels of displacement resulting from those divisions. Contemporary knowledge policies, therefore, become a locus for the examination of a broader web of global politics, as both a space of complicity as well as of conflict and solidarity today. This will thereby trace a history of agendas in knowledge policy in order to approach perspectives of struggle, presenting knowledge from both

formal research as well as struggles around knowledge that I have been involved in.

The "crisis in education" and the shift to the supranational

A unique partnership would be established between individual nation-states and private shareholders with the signing of the Bologna Declaration in 1999. This partnership would be active on a supranational level and would mark the largest globalized wave of reform designated for higher education to date, the Bologna Process. The EHEA and the Bologna Process reforms that established it have significantly shifted national and transnational policies in education to a supranational level, however, that process can be traced to long before the establishment of the EU to early European supranational formations. That history is of enormous importance in understanding the structure of the European knowledge economy and its widespread effects today. Therefore, I will first trace the process in which the contemporary university has formed in relation to those territorial shifts, and will subsequently follow a different timeline in order to view how knowledge policies have been (re-)formed in times of crises in order to aid supranational competition.

The Bologna Process would be signed at the University of Bologna – considered the first "European research university" and the "mother of universities" – by the European Ministers of higher education. The University of Bologna was founded in 1088 as a symbol of Italian national unity and based a university model that would focus on science and research as opposed to the preceding medieval university model, based on Roman Catholic Church schools. That focus on research would see a second wave with the establishment of the "modern university."[3]

With the emergence of modernity came the advent of the nation-state and therewith the formation of the modern university.[4] The framework for the modern university would be laid out with the Humboldt model, founded in 1810 in Berlin as a conscious political project for creating an expansive production of knowledge. With its central principal being the "union of teaching and research in the work of the individual scholar or scientist,"[5] the role of research and the natural sciences would become a model for the rest of Europe. It would significantly reconfigure a notion of knowledge production that would both celebrate early capitalist conceptions of individual freedom and the individual's link to fueling the nation-state's "wealth of knowledge."

Following the establishment of the modern university and its relation to the nation came a long process of reforms which would shift the aims of the modern university to a transnational and supranational level. In 2010, the bicentennial anniversary of the birth of the modern university, the European supranational model for higher education, the EHEA, would be declared "open" during a celebration in Vienna, following the Budapest-Vienna Conference. The EHEA was implemented through the Bologna Process to purportedly remedy the contemporary "crisis in education."[6] That phrase is significant as its mapping highlights a history of policies in education which help clarify the related state of "crisis" today. This analysis will, therefore, continue by mapping out the reforms in relation to those "crises" in order to aid the developing supranational competition.

The first use of the phrase "crisis in education" on a policy level took place with the induction of the US National Defense and Education Act of 1958. It introduced a process in which policies in education would be used for transnational competition in a process of establishing superpower status, which played an important role

in the later process of supranational knowledge area development. The Act introduced a basis for private investment on all levels of education to support technological development by placing a greater emphasis on scientific and mathematical research, advancing education *from childhood to postgraduate*. As "emergency aid," the Act decreased federal supervision for the first time, allowing a boom of low-interest loans and a basis for homogenizing educational curricula. It would lay down a structure that would allow the subsequent reform policies in the US, and would provide a model for reforms in education abroad.[7]

That "emergency aid," however, was originally implemented as a reaction to the launch of Sputnik in 1958 by the USSR. Two major reform processes would take place in the US in 1958 as a reaction to the Sputnik Crisis and a measure for entering the Space Race as a means for gaining dominance as a world superpower during the Cold War.[8] The one process would take place in education and the other would be the drastic simultaneous transformation of the hitherto small National Advisory Committee for Aeronautics (NACA), into one of the largest research facilities in the world, the National Aeronautics and Space Administration (NASA). The development of technology during the Space Race cannot be underestimated. It marked the era when the US was able to resurface as a technological power and as an economic and political superpower after WWII. To this day, the research done at NASA provides some of the most significant RTD for transport as well as for harnessing nuclear energy.

The process of restructuring and strengthening economically, politically and technologically after WWII was of great importance to a war-torn Europe, and a major reform process would take place in Europe in 1958 as well. That year the Treaty of Rome would enter into force, signed by Belgium, France, Italy, Luxembourg,

the Netherlands and West Germany. The Treaty would establish two international organizations based on supranationalism, the European Economic Community (EEC) and the European Atomic Energy Community (EURATOM), modeled after the earlier, first supranational model of the European Coal and Steel Community (ECSC) for making "war not only unthinkable but materially impossible." The ECSC aimed to create a unified Western Europe for sharing the coal and steel in a common protected market. The coal and steel industries were seen as vital to be protected and necessary in the production of ammunition. The ECSC was also to ensure the increased production necessary for Europe's ambitions in Africa.[9] The ECSC extended into the EEC and EURATOM as supranational organizations based on safeguarding resources and the early liberalized structures for removing trade barriers on resources, goods and services, later forming the basis of the Maastricht Treaty, establishing the EU. To date, all treaties of the EU have amended the original Treaty of Rome. Additionally, all current nuclear issues fall under the original EURATOM Treaty.

As the EEC has extended to the EU, the original EURATOM goals exist today as the International Thermonuclear Experimental Reactor (ITER) a nuclear fusion reactor in Cadarache, France. Just as the EEC was founded parallel to EURATOM, promoting the dominance of European nuclear technology, ITER and its necessary RTD are now being supported by the parallel development and expansion of the EU. ITER is expected to be the driving force for energy in Europe by 2050.[10] ITER and its nuclear development work hand in hand with the European Space Agency and are the major focuses of the European Research Area (ERA), which works in conjunction with the EHEA.[11] As the final celebration of the opening of the first formally instated supranational knowledge-based area took place within the historic

symbol of European imperial expansionism, the Hofburg Palace of Vienna, it was certainly no less noteworthy that Vienna also holds the seat of the European Atomic Energy Agency.[12]

Transnational development

As knowledge and technological development would play a major role in strengthening the world's superpowers, the second "crisis in education"[13] would bring a wave of reforms to be implemented outside of the those areas, in the Global South, and would emerge when a limit to natural resources would become pronounced worldwide: during the oil crisis, debt crisis and stagflation of the late 1970s and early 1980s. That new wave of reforms, taking place in the name of "development," would be implemented by the nations and multinational financial institutions which had been strengthened during the Cold War, to outlying post-colonial nations. This was a time when new challenges were posed to the economies of "developed" countries, whereas the materiality of much of those crises was rooted in the so-called "developing" or "underdeveloped" countries of the Global South.

In order to help rebuild a war-torn Europe to become a fit economic competitor, the US developed an economic aid system, Bretton Woods, which would establish the World Bank (WB) and International Monetary Fund (IMF). As the US exceeded technologically, through the Space Race and Arms Race of the Cold War, during the process of economic and political restructuring in Europe, common interests developed for the harnessing of natural resources and the opening of markets in outlying regions of the Global South. Many of those post-colonial nations began forming communist or socialist inclinations in their own processes of restructuring. However, a specific package of

reform policies as development aid laying down the foundation for opening up markets, according to the guidelines of the WB and IMF rather than those of socialism, were implemented in the 1980s as the Structural Adjustment Policies (SAPs). Those reforms brought an increased privatization and deregulation of the economy and of public entitlements, loosening trade barriers for foreign investment. Educational reform would play a key role in the SAPs.

To this day, the repercussions of the systematic privatization of all public entitlements – education, health, transportation, employment or even land and water – which began with the SAPs are still very much present, due to financially segregated access to health, education and land, and the complex web of local corruption supported in the process. George Caffentzis states that: "By 1986 the consequences of SAP were all too evident. Social spending in Sub-Saharan African countries (including spending for education) fell by 26% between 1980 and 1985. Statistics showed that enrollment rates [in education] were declining in many countries for the first time in their history."[14] What these drastic measures managed to accomplish is the creation of a larger gap between the educated and uneducated with rising costs for elite educational and research institutions on one end and a growing mass of unskilled laborers on the other. Numerous ensuing protests against SAPs in universities were met with severe police repression and killings, leaving the permanent presence of the police or army on or around campuses, as well as the regular infiltration of classes by informants – while state funding was removed under the guise of removing state repression.[15] Caffentzis concludes that: "[...] *the main role of the African state is to provide the repressive force necessary for the application of SAP.*"[16]

The SAPs succeeded in paving the way and providing a testing grounds for future reform packages in higher education in other

parts of the world, demonstrating that the higher the level of education the higher the social returns, and more significantly, the higher the returns to the private sector. WB research additionally claims that austerity cuts "boost competitiveness," but not only between individual scholars or laborers. They boost the appeal of foreign investment into the lowest cost laborers on the international market.[17] Caffentzis elaborates on the consequences of these policies, stating:

> "Like their peers in every part of the world, the African youth sees education as the key to a more secure life and a better future; thus they make great sacrifices in order to obtain it. [...] How can families and communities afford to pay when wages are frozen below subsistence levels and the WB and the IMF are committed to further reducing the cost of labor? The operation of a credit system granting loans to a large group of students can only work if real wages are substantially increased above their present level. But the very purpose of SAP is to cut labor costs, so as to make African workers more competitive on the international labor market. This implies that real wages are not expected to rise for a long time, if ever, *considering that every other debtor nation in the Third World – from Asia to Latin America – is being told by the World Bank and the IMF that they have to cut their workers' wages in order to attract foreign investment.*"[18]

Following the original framework laid down by those reforms, a special package of SAPs, called the Washington Consensus, would later be implemented in Eastern Europe immediately after the fall of the Berlin Wall and the breakdown of the communist bloc. It too would open up the region to capitalization and foreign investment, reducing the role of the state economically, privatizing

and homogenizing across the board. What is significant in that process, however, is that educational reforms and other transitional processes of homogenization have since been used as a measure for proving eligibility and as a carrot on a stick for EU integration. For instance, the Bologna Process has been implemented in EU candidate countries much earlier than many countries of the EU.

The implementation of SAPs has played a key role in managing uneven processes of "development." While on the one hand, these reforms have been used as a precise gauge for "development status," they simultaneously stifle development according to their own standards. They provide a double-standard between integration and segregation, which becomes more visible when analyzing processes on a supranational level with, for example, the European Union supporting the mobility of goods, capital, services and citizens; but maintaining murderous border regimes against migration, regulated by bilateral agreements, such as Dublin II or those between Italy and Libya, now proposed for similar implementation in Tunisia. [19] With nations serving as filters for overseeing that supranational policies are implemented and upheld, transnational policy relations are not representative of global solidarity, but rather a strategy for efficiently maximizing assets across fortified supranational areas. All the while, divisions between supranational or global crises are presented, making them appear as independent phenomena to be "healed" by individual nations, hiding a broader interlinked crisis.

Displacement

The division of crises functions hand in hand with unequal "development" and is made invisible through globalized processes of displacement. New strategies for resolving crisis are proposed,

with the structures of knowledge economies playing a significant role in creating and regulating those divides, becoming both a site of complicity but also for struggles in a context of austerity cuts and privatization. However, the importance of displacement extends far beyond being a tool for viewing links between crises. Examining displacement is one of the most important tasks in analyzing the destructive consequences of globalized capitalization and "development" today.

There are several junctures from which to view displacement today, a few of which are: poverty/gentrification, development, migration, brain-drain/knowledge, resources or life and livelihoods. In the metropolitan centers, gentrification pushes visible disturbances of the desired image of the metropole and its modes of production to its peripheries with, for example, former industrial cities deserted or appropriated as slums at the outskirts in a turn to immaterial labor as a process of "development." This process takes place expansively, enforcing a global division of labor, with stricter borders around beautified cities or supranational areas, and individual nations performing the roles of filter mechanisms in the transnational distribution of exploitation and crisis.

We witness the current phenomena of migration globally. Desirable mobility for work and study is illustrated in the media, whereas the undocumented laborers, displaced persons, erased persons and sans papiers support a specific strata of the economy, with continuous attempts at making that process invisible from beautified, fortified landscapes. The subsequent marginalization and isolation create ghettos and slums, weaken solidarity, justify discrimination and tear apart the very social fabric.

Success and failure – on a global scale – are driven under the guise of meritocracy, which claims to be fair under the supposition that

each individual has an equal chance in the free market, supporting that those which work hard prosper and those who are “not productive enough” or “can't keep up” drag down the system and get what they deserve. That preconception extends to and recycles prejudices against migrants with unrecognized, illegal or no employment, prevented by the state from receiving a work permit. The process of meritocracy also extends to ranking a nation's “development” or determining whether an individual or their village are worthy of the affirmative action which may bring them a water spigot. The economic “progress and development” of capitalism exchanges – almost as a currency – one individual's freedom, rights and livelihood for that of another,[20] allowing the definition of the “other” to facilitate and simplify the process, with regulative apparatuses for its maintenance.

Managing limited resources or fossil fuels is clearly a priority for the “developed world,” with its elevated energy consumption. However, that increased energy consumption and place at the top of the “development” ladder is paid for by the “developing” world – 75% of the historical toxic emissions that created the current climate crisis come from 20% of the world, but up to 80% of the impacts of the climate crisis are being experienced in the “developing world.”[21] Developed countries’ excessive emissions are literally limiting the very atmospheric space available to “developing” countries.”[22]

Climate change is the flip-side of the energy crisis, and the increased scarcity is what is “justifying” militarization and land-grabbing today. A recent quote in the *Washington Post* clearly illustrates that trend, calling Ethiopia’s farmland the “hottest commodity in the market.”[23] This “trend” consists of buying up land and resources, guarding the fertile land, crops, clean water deposits or constructed power plants and dams with private militias

– should the state repression not suffice – with the result of the displacement of entire communities, destruction of ecosystems and global or planetary consequences.

Returning to the popular assumption that this analysis opened with, of the financial crisis reverberating globally in a trickle-down structure, if the widely accepted “cause” and “effect” were reversed, then finance capital and its deficiencies would become the intangible reaction by a flexible economy in the face of limited natural resources. The limit to resources, and capital's incapacity for reproduction without destruction, would thereby stand as the root and reflection of unstable destructive capital and not as something which can be solved with it; and the loss of livelihoods and environmental conditions worldwide would not be seen as inevitable in resolving crisis but as a fundamental force which cannot simply be erased or brushed aside any longer. As that structure continuously grasps for methods for preventing crises – the shift to immaterial labor, knowledge policies, displacement – that very system is in itself a crisis.

Knowledge solidarity

Education and knowledge production are major sites of societal transformation today. They base a central reproductive apparatus for those transformations on the one hand, reducing the masses to unskilled laborers, on the other. The importance of the role of a struggle against the commodification of knowledge or educational reform is crucial, because it attacks one of the most deeply rooted processes today. Deconstructing this and examining which overlaps exist in a global division of labor and access to knowledge is a crucial step in understanding complicity and responsibility, and in constructing a cross-sectional solidarity in a struggle against global

forms of oppression. If a reversal in the popular perception of crisis is made, and if knowledge is recognized as central to wielding related policies, then we must reverse the role of knowledge in order to understand it as a fundamental force as well.

Various movements have been developing around knowledge across the world in recent years. For example, the university protests of 2008–2010 in Europe were heavily sparked by the Bologna Process reforms. The protests against SAPs and the neoliberalization of the university have been taking place for decades. Protests against debt and austerity cuts have been spreading where high tuition fees and credit structures, such as the US and UK, are in place. These struggles have been growing in size, fervor, focus as well as their relations and communication between one another, beyond national borders, with a recognition of the relations between the conditions of unemployed academics or unrecognized workers for instance.

The turn to transnational meetings, conferences and protest actions, such as the "counter-summit" protest and blockade in reaction to the celebration of the opening of the EHEA in Vienna in 2010, have expanded to other sites of struggle. While the university protests of recent years have received drastically less media attention than other uprisings of following years, and while many – perhaps due to the minimal yet grim representation in the media – see the university protests as a failure against the inevitability of the Bologna Process implementation or the commercialization of higher education, it is important to understand that this process did not end. It simply shifted location. These struggles must not be brushed aside or forgotten. Many valuable lessons have been learned and they thereby need to be viewed as a flexible living force.

In February 2011, a transnational meeting of struggles in education, entitled "University Struggles Against Austerity," took place in Paris.[24] It took place shortly after the Tunisian revolution, which played an enormous role in both media attention and in solidarity and shifts in struggle. Before the meeting took place, several Tunisian activists who traveled to Paris for the meeting were held at the EU border unable to join. Protests followed and a few Tunisian students attended. A declaration was made by those Tunisians regarding the importance of seeing the struggles which the meeting was based on in relation to the Tunisian uprisings which spread throughout the Maghreb. A declaration by those students followed, calling for the necessity of uniting struggles across the Mediterranean divide. From September 29th to October 2nd, "students, precarious workers, unemployed, and activists of Europe and North Africa met in Tunisia for the transnational meeting 'Réseau de luttes,' [...] to share our knowledge and begin a process of common struggles." The statement claimed that:

> "The struggles that have swept across North Africa over the last few months spoke to the entire globe [...] In the context of the global economic crisis, there are many parallels in the reasons why we are fighting in Europe and why Ben Ali and Mubarak were toppled [...] We are revolting against the misery of the present and to build new social relationships that are produced by processes of liberation and the reappropriation of our collective wealth. These struggles create common spaces that power constantly tries to fragment and repress."[25]

As the uprisings in the Maghreb received an enormous amount of media attention, they were able to give impetus to other

occupations and movements worldwide. Several occupations of public spaces, encampments and occupations of financial centers, from Occupy Wall Street to “Boj Za” in Ljubljana, took place. On October 15th 2011, a global day of action took place incomparable in size and widespread participation to this day.[26] While media attention has certainly played a role in the timing or escalation of various struggles, the communication and correspondences that have evolved took place out of a long process of learning from and communicating with one another. With the shift to transnational forms of struggle, an awareness ensued regarding the ways in which various issues are interlinked in a common struggle. A shift has been underway, but it has in many cases not been a conscious one, rather a backlash against the commonality of the conditions we live in.

The interrelatedness of crisis must be used to broaden our struggles, because representing a separation of independent crises is as effective as the fragmentation of struggle. The fight against the corporate university is part of the fight against banks. The fight against banks is part of the fight against land-grabs. Thus, these issues need to be understood in their complexity and must engage the international community in understanding the commonality, complicity or differentiation and complicatedness of global relations today. With so many policies driven by “the crisis” intervening into knowledge production as its core, we the cultural workers, activists and intellectuals have a responsibility to intervene into the very real social crisis, into understanding how the entire planet is being affected by a global process of displacement in order to look at where the real “crisis in education” actually is.

There is a certain precariousness in allowing the financial crisis or economic condition to be at the center of an expansive struggle.

There cannot be an effective struggle which reproduces notions of competition in a structure which cannot equitably reproduce itself to begin with. This leads to a fragmentation of the manifold struggles, however well connected they may be. In a structure where crisis is the cause and the knowledge-based economy the effect, we must unite in a knowledge-based struggle, to understand knowledges rooted in struggle to create a struggle based in common knowledge,[27] to learn from the survival (not the reform) of austerity cuts and state repression – in the organization of plenums, the publication of statements, the creation of human microphones and autonomous education collectives – in order to *re*-build communities and common structures from those knowledges. So how would a struggle look if it were not articulated in reaction to economic and political repression, but created with the unrecognized *common* knowledges of cross-sectional, cross-border struggle? What if the knowledges of land were used to fight climate change, the knowledges of migration to remove borders, the knowledges of displacement to redistribute wealth, the knowledges of privatization and austerity to build common autonomous spaces for learning from struggle? And what if that knowledge was linked to recognized knowledge as a cross-sectional tool for self-empowerment?

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[1] See, e.g.: Richard Heinberg, *Peak Everything: Waking Up to the Century of Declines,* New Society Publishers, 2007.

[2] See e.g.: http://www.magharebia.com/cocoon/awi/xhtml1/en_GB/features/awi/features/2009/12/09/feature-01; http://

www.magharebia.com/cocoon/awi/xhtml1/en_GB/features/awi/features/2011/01/04/feature-03

[3] "Themes" Rüegg, *A History of the University in Europe*, Vol. I, p. 5

[4] This refers to the classic definition of modernity as the era which established capitalization and the nation-state. It does not refer to the highly disputed discourses on a plurality of modernities, differing temporally and spatially beyond the classical Western definition.

[5] Robert Anderson, "The Idea of a University Today," *History & Policy,* March 2010; http://www.historyandpolicy.org/papers/policy-paper-98.html

[6] Not to be confused with the phrase "crisis of the university," which has been used by, for example, the edu-factory from the perspective of struggle: www.edu-factory.org/edu15/webjournal/n0/webjournal.pdf

[7] John L Rudolph, *Scientists in the Classroom: The Cold War Reconstruction of American Science*, Palgrave, New York, 2002, pp. 168–175.

[8] Ibid.

[9] Robert Schuman Proposal of 9 May 1950, *Schuman Project*; http://www.robert-schuman.eu/declaration_9mai.php

[10] "Q&A: EU Energy Plans," BBC, 9 March 2007; http://news.bbc.co.uk/1/hi/world/europe/4783996.stm

[11] The ERA is a system of scientific research programs integrating the resources of the EU in order to fuel the

competitiveness of European research institutions. The ERA and EHEA are linked in many ways. While they have different specified focuses, they essentially have the same objective and mode of operating in the same area. The Framework Programmes (FP) are funding programs of the EU for the support of the ERA. Nuclear development, with a focus on ITER, is a main objective of the FPs. See, e.g.: European Commission, "FP7: Tomorrow's Answers Start Today"; http://ec.europa.eu/research/fp7/understanding/index.html

[12] The Hofburg and its relation to the Austro-Hungarian Empire is significant in that it does not identify the imperialism of one European power, but a "European imperial expansion" that covered a broader part of Europe and which related very closely to how the EU is expanding today.

For a more detailed analysis on the structure of the EHEA and its peripheries as well as the "counter-summit" of lectures, protests and a blockade that took place in Vienna, see: Lina Dokuzović and Eduard Freudmann, "Fortified Knowledge: From Supranational Governance to Translocal Resistance," *Worlds & Knowledges Otherwise*, Volume 3, Dossier 2: *On Europe, Education, Global Capitalism and Ideology*, Ed. Marina Gržinić, Duke University: Jul 2010; http://trinity.duke.edu/globalstudies/wp-content/uploads/2010/09/DokuzovicFreudmannGrzinicWKO3.2.pdf

[13] Ousseina Alidou, George Caffentzis, Silvia Federici (eds.), *A Thousand Flowers: Social Struggles Against Structural Adjustment in African Universities*, Africa World Press, 2000, p. xii.

[14] George Caffentzis, "The World Bank and Education in Africa," in: Ousseina Alidou, George Caffentzis, Silvia Federici

(eds.), *A Thousand Flowers: Social Struggles Against Structural Adjustment in African Universities*, Africa World Press, 2000, p. 4

[15] Ibid., "The World Bank and Education in Africa," pp. 3–18.

[16] Ibid., p. 16

[17] "WB researchers also pointed out that the social return to investment in primary education was 28%, whole on the tertiary level it was 13%. Again, the *social* return to public investment in higher education was 13%, while return to *private* investment in higher education was 32%." Ibid. p.5

[18] Ibid. p. 10

[19] See, e.g.: Emanuela Paoletti, "More Oil, Less Migrants," Issue 463, *Pambazuka News,* http://www.pambazuka.org/en/category/features/61239; "Freedom not Frontex," http://no-racism.net/article/3725/

[20] A chilling example of the application of such policies can be seen in the analysis of "development" in the Indian district of Singrauli, in which a Home Ministry report states: "No dream could be more painful for the families than to get uprooted from a place where it has lived for generations and to move to a place where he may be a total stranger. Nothing could be more irksome than being asked to switch over to an avocation which the family has not practiced before. Yet the uprooting has to be done because the land occupied by the family is required for a development project which holds promises for progress and prosperity for the country and the people in general. The families getting displaced thus make a sacrifice for the sake of the community and the country as a whole. The oustees undergo hardship and distress and face an uncertain future so that others may live in happiness and be

economically better off." *Cost of Development: The Effect of Big Gigantic Projects in Singrauli*, Srijan Lokhit Samiti, Singrauli, India.

[21] Teng Fei, "Historical Responsibility: From a Perspective of Per Capita Cumulative Emissions," Tsinghua University, 2009; http://unfccc2.meta-fusion.com/kongresse/090601_SB30_Bonn/downl/090604china.pdf

[22] "Climate Debt: The Basis of Fair and Effective Solution to Climate Change," The Plurinational State of Bolivia, *Presentation to Technical Briefing on Historical Responsibility*, United Nations Framework Convention on Climate Change, p. 5; http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/4_bolivia.pdf

[23] "Land to the Grabber: The Rise of the Neo-Gebbar System," 24 Nov 2009, http://gadaa.com/oduu/1719/2009/11/24/ethiopia-land-to-the-grabber-the-rise-of-the-neo-gebbar-system/, referencing: http://www.washingtonpost.com/wp-dyn/content/article/2009/11/22/AR2009112201478.html; for direct links between higher education and land-grabbing, see: Claire Provost & John Vidal, "US Universities in Africa Land Grab," http://www.guardian.co.uk/world/2011/jun/08/us-universities-africa-land-grab

[24] http://www.edu-factory.org/wp/common-statement/

[25] http://international.r02.org/

[26] http://15october.net

[27] These are some of the demands being made by the Lokavidya Jan Andolan (People's Knowledge Movement): http://vidyaashram.org/; http://lokavidyajanandolan.blogspot.com/