

Processes of Dis–location and Re–location of Knowledge and Power

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Abstract

Historical analysis of domination patterns identifies phases of ongoing dialectics between rich and poor world areas, claiming instances of self-determination and empowerment in international programs of cooperation. At the same time, new major imbalances in relations of power emerge between new global players, who appear to be committed in a competition towards the Western model of development, mainly characterized by the control over technologies and knowledge/. /Such practices of emulation provide examples of complicity with the hegemonic rhetoric, and help strengthen pairs of opposites (emerging/advanced, technological/intuitive, hegemonic/subaltern) increasingly polarized and less dialectical.

Abstract (Italiano)

La lettura dei processi di dominazione attraverso le fasi della storia evidenzia una persistente dialettica tra aree ricche e povere del mondo, le cui istanze di autodeterminazione ed emancipazione vengono rivendicate ora anche attraverso i programmi di cooperazione e aiuto. Allo stesso tempo nuovi forti squilibri emergono nelle relazioni di potere tra i protagonisti emergenti della scena globale che si avvicendano in una ricorsa ad un modello di sviluppo, quello occidentale, caratterizzato dalla capacità di controllo di specifiche tecnologie e sistemi di conoscenze. Tali pratiche di emulazione contribuiscono a rinforzare binomi di opposti (emergente/avanzato, tecnologico/intuitivo, egemone/subalterno) sempre più polarizzati e sempre meno dialettici.

Error/errans

The research program presently running at the Institute for Cultural Inquiry in Berlin is called Errans. An entire institute is dedicated to the investigations of the linguistic, epistemic, political, aesthetic boundaries between wandering and making mistakes, moving and mistaking, erring and erring: a powerful figuration of the double, an icastic string describing the uneasy state of people, concepts, material fluxes in motion. An error is a potentially generative phase during a transformative process, a place to stop and start again from. Or is error just a dead end, something to be cured and to be fixed, to overtake and forget, and not to repeat? Are errors stable or moving entities?

A wanderer, or flâneur, or betrayer, deliberately walks across separate spaces, creates material connections where there weren't any through his(her) physical passage. The action of moving across separate spaces, performed as a state of being, inhabited as a permanent condition, has the power to weave networks of connections, to link the improbable, to rephrase the speakable, to redefine the strategy: to fix the error? to embody the error? Uneasy positioning like those of the betrayer or the wanderer imply the complicated decision to abandon what exists, to leave the present and challenge the unorganized, risk the mistake, wander through the error.

A wandering subject is potentially an elusive activist (ICI Berlin 2014), somebody redefining the fields of legitimacy and normated correctness, a subject difficult to catch up with and to grasp, unpredictable and creative. Nomadism is a form of existence, it is an appropriated way of existing,

chosen or suffered, in order to resist hetero-directed norms. The nomadic subject is a social and epistemological errans, a s/object whose languages, desires and frameworks oscillate around the states of a transition of phase, through unstable states far from equilibrium. The errans entities -- people, concepts, material fluxes -- belong simultaneously to multiple spaces, to multiple phases, to transitory states: the previous and the following, across time.

Why should an activist be elusive? what is the advantage of an elusive attitude, recalling a pale and shadowy identity definition? Capitalism resists activism anyway, including its elusive form. Apparently. In this framework, capitalism is not only a powerful political and economic system, it is also the comprehensive concept that includes multiple and very stable categories of power, sets of norms and mechanisms of control that recursively reinforce its structure. The capitalist system may be successful/effective in enforcing its norms because it harbours, accepts and copes well with nomadic subjects, elusive or not, incorporating and metabolizing them, placing them in ever-changing, fashionable, trendy, cool categories. Capitalism mutates and devours elusive activism; it is an adaptive entity, capable of absorbing and shaping desires, transforming deliberate errors, conditions of instability, and elusive states into new, modified, adaptive norms.

Is the error of erring, the mistaken choice of wandering, a form of resistance? What place remains for the errans that does not fall into norms and resists capitalistic processes? There are multiple capitalistic norms to conform to, and multiple spaces for resistance, when exploring the error. But at the same time there are multiple duties to comply to, multiple roles to play. Therefore nomadic subjects as such are not erring/wandering enough, the nomadic condition is not strong enough as a form of global resistance. Capitalism is more skilful, always perceiving border fluctuations, and then attempting to fragment its opponents and scatter them into superpositions of incoherent elements. One more step is needed in order to enhance resistance, appropriate the concept of error, open up the potential it contains. Multiplicity is also needed. The elusive activists are to be transformed into “non-unitarian subjects”, superposition of identities, re-combinations of patterns. Nomadic subjects must become “endless arrays of possible subjects trying to map out what is happening” (ICI Berlin 2014); subjects continuously drawing their own, singular, unique, nomadic synthesis, their own non hetero-directed norms. Nomadic subjects try to sketch adequate representations of their boundaries, imagining them not as limiting spaces, but rather as spaces of error, spaces of possibility. The erring subject is capable of all this: challenging the mistaken, wandering through limits, breaking neoliberal norms.

2. Superposing conceptual fluxes

As an ethnographer, I am compelled to situate my perspective, and to investigate the present from a situated position of opposition. Like nomadism, the ethnographic attitude is a situated condition, a describing attitude changing as a function of time, developing a peculiar gaze, assembling sets of questions. Ethnography follows nomadic people and nomadic concepts. Both concepts and people, in their action of transmigrating, determine a redefinition of power networks, a re-location of the centres of power. Positioning myself on the border of different discourses, I perceive concepts travelling in a flux, in an empowering stream. The cartography of transmigrating concepts maps trajectories of new power relations, to be followed and unravelled. Transmigrating concepts are used by inadequate subjects (Borghini 2004) to re-define over and over nomadic new concepts.

In this context, I try first to situate myself at the crossing of three main geographic-political-scientific fluxes, then to intersect all three. First: the colonial/postcolonial flux, following the power and cultural patterns moving from 19th century Europe, and Britain in particular, towards the colonies, India in particular. Second: the techno-scientific-economic flux, orbiting/roaming over the entire 21st century planet, with a multiplicity of centres of power, contemporary India being surely one of these. Third: the sustainability issue and the new environmental and anthropocenic shared sensitivities it calls for. I try to follow each flux separately, before witnessing series of errors, unstable superpositions, and recording (temporary) convergences.

2.1 Colonial/postcolonial flux

The last decades of the 19th century British Raj in India were characterized by a powerful process of knowledge transfer from the centre of the Empire to its periphery (Prakash 1992, Raina 1996, Arnold 2000). A massive educational program was launched and implemented by skilful colonial administrators convinced of the necessity to “try to teach to the un-teachables”, i.e., to transfer the scientific categories and taxonomies, produced in Europe during the Enlightenment and the Scientific Revolution, to the native élites of India. The explicit educational goal of the program aimed to open first scientific temporary exhibitions and later permanent science museums, displaying the conquests and wonders of modern science and technology. The educational goal was surely not philanthropic, it was rather dictated by a very pragmatic plan oriented at improving and optimizing the possibilities of control over India's natural varieties and unexplored environments. In exhibitions and museums science and technology were presented as properties and distinctive achievements of modern Europe that could be useful and helpful to interpret and organize the confused (or missing) Indian descriptions of Nature. The scientific discourse developed for the colony was based on the creation of conceptual dichotomies, binary couples of opposites, that could not be merged or surpassed by any educational program: native/colonial, intuitive/rational, tentative/technological. Technology and rationality did not belong, and could not start to belong to the Indian scenario. The opening of scientific educational institutions unfolded in a condition of explicit unbalance of power that neither the colonial administrators nor scientific curators really sought to leave behind. Before dealing with science, the exhibition programs faced the need to re-structure what could be called ‘native knowledge’. Taxonomy appears to have been the main pedagogical concern of colonial administrators while the explanation of scientific principles and technological mechanisms remained in the background, and the achievements of science were presented as somewhat wondrous and magical.

The Indian public audience appreciated the 'cultural' operation; the exhibitions were a great successes in terms of visitors and duration; events were replicated in several town and cities, and eventually museums were opened in Calcutta (1875), Madras (1885) and (Prakash 1999). But the concept of 'educational goal needs to be slightly redefined here: the cultural operation in progress was a realignment of categories, a reorganization of the thinking space, a not so sudden though very powerful imposition of norms that included the need to rewrite history and to reorganize the archaeology of ideas (Foucault 1963). This thorough process of realignments enabled the natives to know for the first time about themselves and about the qualities of the artefacts and features of their

environment through colonial categories and observational tools provided by European scientific curators.

All displayed scientific and technical meanings underwent an unavoidable shift, in the course of this imperfect and partial translation; the missing technical explanations opened the way to creative processes of misunderstanding, mistakes, misuses. Nevertheless, newly founded educational institutions were financed and eventually flourished, becoming the specific contexts for cultural transfer, for attempts at multiple translations, reinterpretation, and appropriation of ideas typical of the 'west'. According to Dhruv Raina, the early educational colonial institutions were the places where the ideas of freedom and self determination were also translated and appropriated for the first time (Raina 2004); they unexpectedly became the places where the independence movement emerged and developed, acquiring most of its theoretical strength. Colonial institutions became elusive activists' hatcheries.

2.2 Techno/scientific/economic flux

(Dislocating and Relocating Multinational Corporations)

In other papers I have written detailed case studies of western multinational corporations expanding in India during the last two decades (Bougleux 2012, 2014, 2015). My thesis here is that the expansion process enacted by corporations in the emerging Indian scenario follows a trajectory similar to the opening of scientific exhibitions and museums in India during colonial times. The two historical processes show a serious commitment to realize massive transfers of knowledge from one side to the other, accurately financing and following the whole process; a permanent unbalance of power characterizing the relationships among the partners; an intense and non linear networking of hegemonic and subaltern patterns that eventually succeeds in transforming the outcomes and goals of the hegemonic dis-locating operations through a progressive re-signification and appropriation of meanings.

Through a prolonged though fragmented fieldwork, I analyzed the processes of knowledge appropriation enacted by the Indian workforce employed by the corporation at the *Research & Development Centre* in Bangalore. The corporation is a productive, economical, political subject with a high technical and scientific profile, whose mission is to transform skills into technology and profit, and vice versa. With a budget comparable to those of entire countries, multinational corporations are decisive players in the economic global scenario. The geo-economic expansion programs of multinational corporations pose serious constraints to the development politics of apparently independent governments; corporation policies shape the relations of power among the areas of the planet according to corporate aims, and transform environmental, energetic, and resource management trends of continents for decades (Stiglitz 2000). Despite the fact that a multinational corporation is an economical and political subject, it holds no social responsibilities. It is an opaque, omnivorous subject, a somehow welcoming, inclusive, always productive body. It is ambiguous, potentially dangerous, deterritorialized and extremely differentiated in its actions, a sort of multi-functional cosmos where all devices and sub-organisms converge in the final profit production, in almost any condition (Bougleux 2015: 6). The corporation I describe here acts, in many respects, as a colonial power.

The Research Centre that I have studied for several years opened in Bangalore in 2000; it functions as an exemplary operational black box programmed to transform knowledge and application skills into production processes and market products. Concepts turn there into objects, objects into profit, and knowledge is transformed into power. The massive knowledge transfer that the corporation sets up, facing high costs and not irrelevant commercial risks, consists of a large in-office training program, the so called Training-on-the-Job, where newly recruited young Indian professionals are taught how to deal with a real research task, respecting clients deadlines and fulfilling corporate standards. The young professionals work in small teams with a senior engineer accompanying their work, until they are considered reliable and autonomous: i.e., when they have become perfect corporate employees, ready to let all their expertise converge towards the construction of the corporation's comprehensive profit. It is apparently a fair exchange: on the one hand, expanding in India, the corporation gains a large available qualified workforce ready to join global competition at cheaper costs than in Europe or the States; on the other, corporation salaries are substantially higher than local ones, and the qualified job offer market in India is (still) very lively, so that the young professionals are not really tied to the first US or EU corporate context that buys their competences, but are in the position of choosing and selecting whom they prefer to work for.

This is exactly the relevant aspect for our present discourse: the knowledge developed and implemented by Indian young professional working for the western corporation, to whom does it belong? Who owns the right to exploit the follow-ups of the massive knowledge transfer that the corporation has paid for? Obviously products and applications belong to the corporation that owns the laboratories where procedures are taught and prototypes are realized; and also, despite some technical difficulties in enforcing corporate patents' security, the copyright of newly developed products belongs to the corporation. But who owns the skills of the young professionals? Who owns the ideas that emerge thanks to the skills transferred during the programs of Training-on-the-Job? Whose is the power that more or less directly derives from the capacity to master technical equipments and managing advanced problems? We might rearticulate this question better, focussing on the interferences always arising between context and content, in this case between cultural context and scientific content; we could then situate the question by asking what happens to the concepts of (western scientific) knowledge, including its high-tech, material development and disposable technology, when transferred in the emerging context of southern India.

Further context description is needed before trying to answer those points: young Indian professionals in the early stages of their scientific career for the corporation seem to take advantage of the many opportunities that the lively job market provides in the competitive scenario of the Bangalore industrial district where jobs are frequently dropped, and job changes are easy to realize. Soon after quitting a job, new good positions requiring high qualification are as easily found; western corporations replace one another as disposable work providers. The underlying strategy is that of subtracting competences and applied knowledge skills from the corporations training programs, appropriate them, and reinvest them locally and more profitably, launching independent though smaller and more fragile enterprises. A similar attitude can be (tentatively) explained only if a general rescaling of priorities and attributed values between the Indian and the western scenario is performed: to start with, working for a multinational corporation is not perceived in India as a

privilege or as a special reason of pride. Working for a large scale global corporation is a condition linked in the western imaginary to western economic history, to the long term processes of industrial development, and to the hegemonic role it anyhow recalls -- issues that cannot easily apply to an emerging and postcolonial scenario. In consequence, the voluntary quitting of a well paid job also appears as a decision much less hard to take.

As a second step, the very meaning of the technological object is to be redefined in the Indian context: its highly symbolic and pervasive metaphorical power, shared and undisputed in our social scenario, is scaled down and resized back to simple material terms. Technologies are tools for measuring, instruments with relative power, just one technical possibility to construct knowledge among many possible others. Technology is not a metaphor of success, there is no technosphere myth; nor can technology be an index of development, a flawless strategy to exert control over reality; rather, it is pushed back to its original condition of artefact, useful device to measure an effect, instrument to evaluate the efficiency of a project. Technology cannot measure welfare, nor the rate of happiness, or the increased life standards of corporate workers.

Both described cultural aspects bring us towards a plausible assembled answer: (forms of) knowledge are reshaped and changed during processes of relocation and transfer: their meanings shift, their implications mutate. (Forms of) knowledge are flexible and adaptive entities subjected to the multiple, contextual, unpredictable interferences between the original and the final socio-cultural environments they travel through, modifying their assets of power and the potentialities of the receivers.

In particular, triggering processes of transfer of knowledge in a context of power imbalance, from a presumed hegemonic to a supposed subaltern subject, implies a major redefinition of the concepts' semantics and their metaphorical implications, including scientific or techno-scientific concepts. For the Indian young professionals quitting their jobs for the western corporation, the appropriation of technical knowledge becomes the venue to claim an autonomous national recognition. Despite being owned by the corporation, knowledge is nomadic, it empowers subjects, evolving, mutating with them while drawing and redefining their dynamic, shifting boundaries.

2.3 Sustainable/environmental/anthropocenic flux

Is it actually possible to reinterpret and to appropriate scientific concepts? Does the shift in scientific meaning always make sense? And above all, who can speak for a (scientific) concept that loses its meaning, that does not maintain its epistemological promises?

If we say that concepts at large are never politically neutral, we have a consistent part of the history of philosophy supporting our statement: the persuasive power of concepts is historically tied to the capacity of speech, to the empowered position of those who support it, to the possibility of naming and addressing through its categories some recognizable matter. Concepts do not live in an abstract and empty space where they are only true or false; they are brought about by bodies and objects, they are inside and about matter, therefore they are context dependant functions of space and time. Concepts contain a dynamic dimension that makes the study of cultures a necessary undertaking, and places the metaphor of *flux* at the top of recurring cultural figurations. But what about science? Is science not "Science"? Science is expected to be a proof, to be empirically well-constructed evidence. Science is figures that do not allow ambiguities. How does the figuration of flux

coexist with a scientific concept? Here, I wish to point out that figures, as data, are not always *given*; data are constructed, they are context-dependent arrays or partial evidences, therefore they are always incomplete; data and figures transform their meaning according to fluxes of hypotheses. Data as well as figures may be misleading, being pieces of multiple truths (Cartwright 2003, Hacking 2009).

Complexity is a good example of a serious and coherent scientific theory that allows for, and actually completely relies on, the coexistence of multiple truths. It is not possible to remain neutral when facing the many choices that complexity asks us to make: each complex phenomenon requires from the reader an active interpretation, a selection among the possible paths, a series of inclusions and several exclusions.

Complexity contains bifurcations, splitting consequences from the same sets of causes; it contains the arbitrary up-scaling of small and apparently irrelevant causes, unexpected amplifications of micro effects silently unfolded over long periods of time, and eventually bursting. And, most interesting for our present discourse, complexity contains scale invariance: once a mechanism has been explained at a given (data?) dimension, it can be replicated in larger and smaller scale systems, without losing in resolution when expanding, nor requiring a filter when contracting. The fractal representation of complexity is my favourite: it is fragmented though united, it is multiple though one dimensioned, and it is scale invariant: no zooming in or out can add or take away its detailed features. Normally, a fractal is also highly coloured. In such scenario, the reader of a complex system becomes a co-author of the meaning, a co-developer of the epistemological pattern. A sort of indeterminism borrowed from the theory of quanta invests the entire structure of meanings, an indeterminism that does not talk of final uncertainties of meaning, but rather emphasises the processes and the transitory phases of the construction of meaning.

There is an immediate reason for preferring a complex approach among the scientific theories available to explain reality: the reason is that reality is complex. Science is unfortunately too simple sometimes, for it simplifies reality in order to understand it, it breaks up difficulties into pieces to be solved one by one; but the individually resolved pieces do not fit back together to assemble reality. Luckily, complexity is never simple.

In a great paper written in 2010, Lakoff points out the risks of simplification, a strategy widely adopted when the frames we can use to explain emerging concepts or phenomena appear inadequate and failing. We always need frames in order to grasp awkward problems: a set of data (data once more!) does not have meaning in itself, without a frame around it. The process of understanding can not avoid framing, which networks between previous knowledge and new information. Framing is also a generative action, because understanding requires the construction of ever new frames that refer to and rely on previous existing ones. Facing the difficulties of 'giving an explanation' is not so severe a problem as the lack of frames, in Lakoff's view: when pertinent frames are absent, data acquire no meaning, and simplified frames appear to replace the too difficult, missing ones. A simpler frame providing a temporary and partial explanation is possibly locally more effective; a simple frame is easier to describe and remember; but its dialectic and popular success risks to occupy a permanent place in the human explanatory scenarios, preventing a more complex frame to be developed or even hypothesised.

Climate change is a typical complex problem, suffering a sever lack of proper framing. It contains multiple layers of meaning, a multiplicity of non linear cause-effect relations, the

coexistence of different scales. Since the frames we might rely on in order to refer to climate change core problems are often wrong, they may induce misrepresentations, and eventually long lasting misunderstandings. Wrong or too simple frames unfortunately survive their original meaning. Lakoff is very clear in blaming the political, deliberate use by American republicans of simplified and inadequate frames to address the climate change issues. Their goal is to hide, or anyway to underestimate, the role of human choices and responsibilities in modifying global climate. Polluting activities, industrial gas emissions, soil and water extended exploitation are all studied separately, described with different and non homogeneous parameters, so that the interlinks among the consequences of these actions do not show up. The environmentalists are weaker because their multi-layered and multi-problematic thought is too complex to define. The deficit of frames that connect human activities to global environmental effects creates a problem not just in terms of the possibilities to explain the present; rejecting or not developing such frames amounts to not taking responsibility for what else will happen in the near future. A frame we may in general benefit from is that of hypo-cognition, a condition that more and more characterizes the vast majority of attempts to grasp awkward global implications.

Luckily, frames are culture-dependent. A shift in location, or a shift in context, is a potential shift in the capacity to use frames. Actually, commonly shared frames are preferable in order to deal with a global problem like climate change: the hope is that, shifting from one cultural context to another, some new frame to describe the environment and the way it is changing can be intercepted, and therefore adopted. Nomadism is a wishful frame resource.

3. Superposition of fluxes

Let us go back to India. During my fieldwork in the corporation, I started following how the roles and actions of the workers changed, especially the roles of concept workers like programmers and researchers, once they quitted their Training-on-the-Job and became active proponents of new processes and products.

Among several advanced technologies, the corporation I investigated produces solar panels for industrial use: technologically sophisticated and perfect objects, and also expensive, bulky and heavy objects, typical outcomes of large industrial production. The Research Center in Bangalore, populated by commuters originating in the rural areas of Karnataka, just one year after the beginning of its research activities with locally hired personnel, in 2001, proposed the design of small and portable solar panels: low cost, lightweight and resistant, suitable to be installed on the roofs of fragile family dwellings; designed not to light a city, nor a building, but suitable to shed light in a room and to recharge a cell phone (Bougleux 2012a). The role played by the young Indian professionals as promoters of this innovation deserves some emphasis. The researchers performed the interesting double role of local and global subjects, constructing the material mediation and realizing the practical interface between distant and irreducible contexts, using technology as a connecting thread. They translated the rural needs into sustainable corporate innovations.

The corporate management, over the years, eventually welcomed the challenge launched by its peripheral but very lively Research Center, deciding to realize, after several phases of accurate check, to redesign and test the commercial production of the small solar panel. 'Mini-low-cost-solar' was presented to the global public as the result of a main corporate investment in research for

sustainable technologies, highlighted as the core product in the green production line, advertised with proud and enthusiastic tones. But the ethnography of productions tells a different story: the 'Mini-low-cost-solar' is the result of an emerging, unexpected, and surprising compromise between local and rural needs on one side, technological expertise and market constraints on the other. In a provocative synthesis, the corporation had appropriated its Indian researchers' ideas by attributing to their product the widely advertised green program, a quite prominent purpose in the corporation's strategies of communication.

If the corporation is intended as a single unitary entity, it can certainly boast about its capability of realizing green innovation; but inside its structure the credits and recognition for the green innovation success are deliberately directed towards the wrong department: they are attributed to a spin off dedicated to develop the corporate sustainable policies, sitting in New York and totally unrelated with the Bangalore Research Center. The only real shared statement at corporate level is that the mini solar panel is realized, it only costs two hundred dollars, it bears the brand of the multinational, which means that it is recognized worldwide as an efficient and reliable product. In fact it was soon widely requested, and in a short time it turned out to be a huge commercial success, initially geographically limited, then global.

In the corporation Research Center the skills and competencies to implement the Mini-low-cost-solar for family use were certainly already available, but the pressing question that makes these skills assemble and converge towards a realized object, an exemplary case of sustainable innovation, arrives from rural settings, through the personal, unplanned mediation of the local engineers employed in R&D.

These engineers find themselves in positions of interface between two worlds: they have studied in universities organized according to western standards, they live in big cosmopolitan cities, and work for foreign multinationals; but they also belong to the rural environment where their families still reside, far from road and rail networks, without electricity, left on the edge of the economic and social macro-processes that are transforming an always increasing part of India. They have the power to articulate the needs and demands of familiar contexts which they obviously know well in terms of the combinations of the existing technology that they know equally well.

Thanks to the cultural flux and hybrid implementation they embody, the corporation finds itself in the unprecedented position of being able to take into account the requirements of small and marginal communities that would have never entered the pages of its market analyses. The quest for technology expressed by rural settings cannot be classified through the categories used to describe the so called 'customer culture': instances from this part of the 'market' can be conveyed only silently inside the corporation by the continuative embodied translation of the employees.

The answer produced by the corporation in the form of new technology represents a reinterpretation of the rural needs that implies several steps of appropriation: standard cognitive elements and verified production procedures are reassembled and become basic components of a new specifically characterized construction: the Mini-low-cost-solar is a safe, efficient, personalized little new piece of reinterpreted technology.

This exemplary case has as final beneficiaries local domestic users, but the entire process can also be considered paradigmatic from another perspective: the sort of 'double exchange' triggered locally between the R&D and its rural context, but destined to expand and modify the mechanisms of

global equilibrium between economics and research. The market success of the low cost products, initially developed for a poorer target and soon welcomed in the market worldwide, proves that research can actually require high investments, but its results may then appear from unexpected directions; more, it proves that advanced technology can be economically affordable; and more, economically affordable technologies eventually pay off. In the present case study, all these transitions are made possible by the relocation-and-dislocation of ideas and people taken place within the corporation, a sort of unintended consequence of the neo-colonial process of corporate expansion. Far from being assimilated and conformed, the techno-scientific flux passing through the Bangalore Research Centre is, in our sense, nomadic enough to be creative, elusive and at least temporarily empowering.

At this point, it is worth asking whether the whole operation of Indian design of new technologies, the related growth of awareness and capability to intercept local needs, the global commercial success of sustainable green products, is actually a success for our cultural perspective, focussed on translation and appropriation of concepts as empowering tools, or a gift in terms of increased profits for the corporation.

These question should be addressed to the corporation workers employed at the R&D: is it more rewarding to identify with the corporate official narrative, telling the story of a global shared success without any individual author, or is there a prevailing feeling of misrecognition, the impression of being in some way victims of a credit denial, and of a subtraction of intellectual property? How deep is the appropriation process, how many unrecognized results can it stand for? Once more, ethnography provides surprising answers.

My informants tell me that the success of a product developed at the R&D of the corporation is perceived as a personal matter, as an episode of significant success in the private sphere: given the little or no identification with the corporate recognized brand, there is also little illusion (and delusion) for the brand's misconducts. The official corporate narrative about shared success is of course rejected as a whole, but the disappointment potentially tied to the missing recognition is also rejected. The innovative skills of the young professionals are to be recognized among Indian colleagues, among relatives and friends. The social level of recognition exclude the corporation official discourse in all its manifestations. While the value and success of innovation belong to the individual, and in the larger picture to India, the corporation is just depicted as the background subject that only provided the context that made the processes possible.

One more interesting and ambivalent role is also emerging for the reinterpreted corporation: while its actions appear wholly hetero-determined, only responding to the profit-oriented central logic, its very presence introduces a network of widespread and well-tested communication channels, and gives access to a series of competences and skills that may escape from the mere corporate applications, and that are actually re-signified in unexpected ways. The appropriation of the Research Centre is a slow, gradual, not dramatic, process that does not generate signs of rejection, but rather recalls the development of a symbiotic relationship. The degree of success of the appropriation process is also evident in the mild reaction of acquiescence that the corporation enacts, at least on the time scale of my observation. The open question is whether this type of appropriation is epistemic, functional, emotional; whether it is occasional or structural; so far, it is certainly not an economic appropriation, and this remains, both on political and ethical sides, the most limiting

aspect of this entire discourse on a large scale. However, I see margins of success on a small, individual scale: the young engineers, researchers and technicians whom I met in the laboratories, belonging simultaneously to two distant and different worlds, despite overlaps and interdependence are effective nomadic entities: their work performs a negotiation that develops an everyday interface between languages, logic and needs, ways of being and thinking. They reassemble the meanings, translate desires, break boundaries, escape norms, elude the corporation, fluctuate as superposition of possibilities.

References

- Appadurai, Arjun. 2001. *Modernità in polvere*. Roma: Meltemi.
- Arnold, David. 2000. *Science, Technology and Medicine in Colonial India*. Cambridge: Cambridge University Press.
- Borghi, Liana and Clotide Barbarulli, eds. 2004. *Figure della Complessità. Genere e intercultura*. Cagliari: Cucc.
- Bougleux, Elena. 2012a. *Soggetti egemoni e saperi subalterni*. Firenze: Nardini.
- . 2012b. “Exploring Knowledge Flows in a Multinational Corporation.” *World Futures*, 68:188-196.
- . 2014. “Corporations, tecnoscienze e sviluppo locale: dialogo o Conflitto”. *DADA Rivista di Antropologia post-globale*, 1, 06/2014: 91-118.
- . 2015. “Economy, Knowledge, Families: Practices of Appropriation”. *Human Affairs*, 25, 1/2015: 3-15.
- Bourdieu, Pierre. 2004. *Le strutture sociali dell'economia*. Trieste: Asterios.
- Braidotti, Rosi. 2002. *Nuovi soggetti nomadi. Transizioni e identità postnazionaliste*. Bologna: Sossella.
- . 2006. *Transpositions: On Nomadic Ethics*. Cambridge: Polity.
- Cartwright, Nancy. 2003. *How the Laws of Physics Lie*. Oxford: Oxford University Press.
- Chakrabarty, Dipesh. 2004. *Provincializzare l'Europa*. Roma: Meltemi.
- Czarniawska, Barbara. 1998. “A Narrative Approach to Organization Studies”. *Qualitative Research Methods*, v. 43, London: Sage.
- Das, Veena. 2000. *Critical events: an Anthropological Perspective on Contemporary India*. Oxford: Oxford University Press.
- Fischer, Michael J. 2007. “Four Genealogies for a Recombinant Anthropology of Science and Technology”. *Cultural Anthropology*, 22: 539-615.
- . 2009. *Anthropological Futures*, Durham and London: Duke University Press.
- Foucault, Michel. 1967. *Le parole e le cose: un'archeologia delle scienze umane*. Milano: Rizzoli.
- . 1980. *L'archeologia del sapere*, Milano: Rizzoli.
- Guha, Ranajit. 1998. *Dominance without Hegemony: History and Power in Colonial India*. Cambridge: Harvard University Press.
- Gupta, Akhil and James Ferguson, 1997, *Culture, Power, Place: Explorations in Critical Anthropology*, Durham: Duke University Press.
- Hacking, Ian. 1999. *The Social Construction of What?* Cambridge: Harvard University Press.
- Harding, Sandra. 2008. *Sciences from Below. Postcolonialities and Modernities*. Durham and London: Duke University Press.
- ICI Berlin. 2014. “Rosi Braidotti: Thinking as a Nomadic Subject” Video, 47:39. Oct 7, 19:30. <https://www.ici-berlin.org/event/620/>
- Knorr Cetina, Karin. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge: Harvard University Press.

- Lakoff, George. 2010. “Why it Matters How We Frame the Environment”. *Environmental Communication*, 4 (1): 70-81.
- Nader, Laura. 1996. *Naked Science: Anthropological Inquiry into Boundaries, Power and Knowledge*. London: Routledge.
- Polanyi, Karl. 1974. *La grande trasformazione*. Torino: Einaudi.
- Prakash, Gyan. 1992. “Science ‘Gone Native’ in Colonial India”. *Representations*, 40: 153-178.
- . 1999. *Another Reason. Science and Imagination in Modern India*. Princeton: Princeton University Press.
- Raina, Dhruv. 1996. “Reconfiguring the Centre. On the Structure of Scientific Exchanges in Colonial India.” *Minerva*, 34: 161-176.
- . 2004. *Domesticating Modern Science*. New Delhi: Tulika.
- Stiglitz, Joseph. E. 2000. *Making Globalization work*. New York: W. W. Norton & Company.
- . 2009. *La globalizzazione e i suoi oppositori*. Torino: Einaudi.

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