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Multipolar Learning: Organizing a New Modus Operandis for an Age of Globalization

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Introduction

Ours is an age of perplexity and flux. In one arena after another old habits and practices have been characterized by ruptures, blockages and conflicts. These ruptures and blockages do not only happen in peripheral parts of the socio-economic system, but has crept into what many considered to be the very core of governance regimes constructed in the aftermath of Fordism and Keynesianism (Aglietta 1976). The financial crisis of 2008 marked not only the rupturing of a subsystem of the post-Keynesian-Fordist system, but undermined the very core of that system as finance came to dominate both private enterprises and national governments. The ascendancy of finance emerged through systematic deregulation in the 1980s and 1990s, giving rise to the CFO and the market as primarily drivers of change (Zorn 2004). Post-crisis we can see that the crisis in financial market did not weaken the role of financial institutions in disciplining other parts of the economy, as can we see in the turn to austerity by all governments in the EU, where the body of politics simultaneously try re-establish the financial system and escape from being so heavily dependent on it (Blyth 2013).

Though our age carries many uncertainties, situations of perplexity are very interesting as seen from the philosophic position of American pragmatism (Peirce, Dewey, Mead and others). Such periods of non-normality, causes us – both practitioners in different fields and scholars - to think, spurred by the irritation of “doubt” to how the “system” is functioning and the need to find out what caused the crisis. This struggle, which Pierce saw as *inquiry* (Emirbayer and Maynard 2011), is one of the intellectual and practical challenge of our time. According to Pierce and Dewey we learn from inquiry. That is by making inquiries into problematic situations of uncertainty; when we face such troubling situations our habitual actions are upset and it is this ‘irritation of doubt’ in our experience, which creates the basis for new experiences. (Pierce 1877/1955: 9). Pierce's basic point is that the “irritation” of doubt moves us to act – to remove doubt and restore the state of belief. Exactly because doubt and uncertainty generate an irritation we would rather avoid, doubt becomes a motivation (i.e. a trigger) to reflect upon the usefulness of our current beliefs and consequently eventually change them in order to reduce the irritation of doubt. Therefore, according to Pierce, doubt should not be regarded as negative, but as a positive state that motivates inquiry and thus learning. He sums up this point by saying: “The irritation of doubt causes a struggle to attain a state of belief. I shall term this struggle inquiry” (Ibid. 10). It is this understanding of learning that constitutes the backbone of our exploration of multipolar learning orders in this volume. Within such a pragmatist view on learning, reflexive “I”’s may be raised against the role-taking “me”’s that constitute situations as normal (Mead 1967). The aim is to constitute reflexive communities that engage in systematic inquiry, hereby examining “the facts of their situation, critically observe what is before them, seek to clarify what is causing them perplexity, and attend to it” (Emirbayer and Maynard 2011). The key question is how to organize for and govern such communities of struggling inquiry across multiple poles and boundaries.

Capacitating social spaces and mechanisms for self-doubt probably belongs to the most promising of all capacities of “reflexive modernization”, and it proceeds in complicated recursive steps by forming critical “publics” (Dewey 1927) and by becoming effective in the way practices are modified or changed. As Pierce (1955: ch 27) has suggested it unfolds by a process of evolutionary love in which ideas are contested at first in the minds of individuals, then by larger communities, to become organized for combat with old ideational-matrices and practices so as to be practically amalgamated in the practices and habits of the larger society, in the identities of individuals and in the way they mutually take on and align roles in new ways. Yet, this way of learning is not an easy one. The purpose of this working paper is to investigate how the ‘irritation of doubt’ plays out among transnational actors from the public and the private sector, and how processes of learning are developed by those irritated. We propose a concept of ‘multipolar learning’, which is concerned with the articulation of reflective ‘Is’ who are able to learn within complex transnational environments, rather than unreflective ‘mes’ bunkering down into national silos. We suggest that multipolar learning has two main aspects. The first aspect is that learning within transnational environments is more about *organizing* than organization (Tsoukas and Chia 2002), that learning processes are part of an ongoing search rather than a fixed form. Learning from multiple poles of activity, encountering different identities, requires flexibility. But this is not to focus on agential processes and throw out structure completely. The second aspect of multipolar learning is learning *architectures,* which vary from case to case but provide a broader schematic within which multipolar learning can occur. Organizing and architectures are at the multipolar learning and allow us to trace the processes of multipolar learning and map the topography through which they travel. (cf. Georgakakis and Rowell 2010).

This working paper first discusses the classic literature on organizing learning. We then discuss literature that provides us with cues and clues on how a search for learning might be conducted. This is followed by an outline of the concept of multipolar learning, in which we identify three blindspots that must be overcome. The first is that learning is often treated as a 'black box’ concept reliant on demonstrating outcomes rather than processes. The second is that learning is nearly always viewed in cooperative environments when conflict and competition are also stimuli for learning. The third blind spot is the association between learning and proximity and homophily, when learning can take place in more complex transnational architectures with a diverse cast of actors.

ORGANIZING FOR LEARNING UNDER CLASSICAL AND CORPORATE CAPITALISM.

There is a long scholarly tradition of problematizing how capitalist societies learn. Habermas in 1973 in his *Legitimationsprobleme in Spätkapitalismus* said that late-capitalism possessed an incapacity for non-learning, while simultaneously characterizing the developmental level of a society by the institutionally allowed learning-capacity. At a fundamental level the institutionally allowed learning-capacity is rooted in the very constitution of

liberal, democratic market societies. For instance, whereas Machiavelli observed that it was a very risky project to operate as an innovator if being an 'unarmed prophet' under a prince (Machiavelli 1977), he simultaneously argued that it was much easier to operate in this way under a republic with some kind of representative democracy, and this gave the latter a better chance for making changes and adapting without changing the very constituency of society (Machiavelli 1978). In parliaments new ideas may contest old and members may gradual fight for increasing support. In a market it is possible to fight for the recognition of new ideas and use this to gain supporters in the form of customers without risking life and property. And if access to markets is free, that is not being controlled by the prince's or a guild's right to grant such access in the form of a privilege, the market can be seen as a space for contesting each other in bringing new products, innovations and forms of business enterprises alive, to fight in non-violent ways for the progress of what a market player finds wanting. Adam Smith, no doubt, saw the interaction on markets as a way of developing a humanity that simultaneously internalized the attitudes of contextual spectators in order to engineer such progress. In his *Moral Sentiments* (Smith 1976) we find so to speak his argument for markets as a realm in which actors translates the the reactions of external spectators into an internal spectator that is capable of "taking on the role of others" in much the same way as spelled out by Mead. Thus in its essence democratic market societies possess an institutional capacity for learning – and even a simple form of multipolar learning as it allows on a broad scale the multitude to test ideas in front of arenas for contestation and selection.

The dominant form of learning in capitalist economies occurs through competition as well as cooperation between actors. Whereas prophets and innovators can enter the game unarmed and basically protected by the free right of speech, the basic game is about competition either for votes or for market-position. What survives in both realms are primarily determined by selection, though a multiplicity of ways exist in which business and politics may combine to give a certain slope to the selection process (Runciman 2009). A historical review and comparative analyses will show that learning is far from promising teleological progression. Creative destruction may happen but will not always wind up with society being at a higher level of evolution or civilization. Destructive creativity is as much a part of the game (Schumpeter 1970).

Democracy and markets in these ways create spaces for a growth in functional differentiation to an extent never seen before in Western cultures (Parsons 1967). But this differentiation does not happen by atomistic individuals engaging in direct exchange and division of labor in markets and free communication and discourses at parliaments. Participants empower themselves by creating organizations, parties, interest groups, social movements and publics to influence the state and form enterprises, banks, unions, cooperatives, etc to conquer the market place. In this way learning unfolds not simply by the even contest among minds, product-ideas and political ideas of individuals but as collaboration as well as the strategic rivalry

among organizations, a rivalry that in turn becomes tamed, civilized and predictable through the formation of institutions.

Weick and Westley (2006) have pointed out that organizing and learning constitute an oxymoron, as they are antithetical processes. In Peirce's understanding, one organizes a firm, a political party or an interest organization as an army (by other means) to fight for the diffusion of an innovation, a political ideology or a set of interests. The typical way of doing this has been to form a bureaucracy with a rational composition of means and ends, configured to address a given context and being driven by the visions of its principal. One could say that organizing this way helps becoming single-minded and one of the repetitive observations around bureaucracies have been that the rule-bound way of working makes it difficult to change behavior.

Merton (1957) and his group at Columbia University were among the first to see that bureaucracies were in many ways deficient concerning the utmost important function of organizational entities of society: the capability for adaptation. Instead power-politics within organizations created swarms of dysfunctional unintended consequences, when rivaling social groups contested each other in manning the hierarchical positions of the bureaucracy.

Yet, in many ways modern bureaucracies are the outcome of a civilizational process that broke with early capitalisms patriarchic forms of organization, arbitrary ways of distributing power and privilege, gang-like social organizations, clientelism and corruption – as in the Gilded Age in the US (Kristensen, 2013). The virtues of bureaucracy: meritocracy, rules, rational development of means to ends and ascribing authority to offices and positions rather than to persons, are all achievements that when found lacking in a society may lead to decay and hardnosed legitimacy-gaps (Du Gay 2000). As Weber reminds us, the formation of modern bureaucracy has occurred hand in hand with modern capitalism in 19th and early-20th centuries through, 'the gradual expropriation of independent producers' and a move towards centralization and rationalization (Weber 1956: 31).

Bureaucracies have evolved in their attempts to deal with their internal and external deficiencies. Corporate bureaucracies constitute good examples. At their core, they were seen to constitute a distinct form of learning. The functional division of labour within a bureaucracy - or what Chandler called the U-form corporation - was very early seen to lead to increasingly more efficient routine-operation among operators as repetition and constant refinement of routines were thought to lead to more efficiency. This form of single-loop (Argyris and Schön 1978) or "learning I" (Bateson 1972: 279-308) "is acquired through trial and error selection of a possibility within a set of options" (Hawkins 2004: 415). Thus though they come about by a rather simple-minded processes, these routines have been seen by organization economists to constitute the very genes of an organization and these are what stable bureaucracies may be best at achieving (Nelson and Winter 1982). But this mode of cultivating routines also has some crucial limitations. As observed by Bateson, Learning I happens by individuals that in an arbitrary way punctuates events and experience, dependent on their mixture of

individual and collective socialization processes. This means that the way an individual employee refines a given routine by repeating it under changing circumstances may lead to quite idiosyncratic outcomes. If this, furthermore, happens under a labor-collective of deliberate “soldiering”, the outcome may be subversive to organizational performance and the general interest, as pointed out by Taylor (1911/1998).

His answer to this challenge was Scientific Management, which should be embodied in a separate staff-function that develop operative routine-templates by using scientific methods and through guidance of the line-organization implement these as optimized routines at the shop-floor. Thus a new body of learning is constituted at a higher hierarchical level in the organization to compete with the way operators refine routines. One might say that a new way of working with routines embodied in the habitus of engineering science is institutionalized at a hierarchical higher level in the organization to compete with the habitus of operators way of working on routines. But this does not necessarily lead to double loop learning (Argyris and Schön 1974) or Learning II (Bateson 1972). Were the learning parties able to recognize that there exist various ways of punctuating events and experiences so that they discover the different mental frames within which the polar parties operate, they could make these frames or ways of punctuating themselves objects of reflection and learning, so that a step towards Learning II could take place. But the literature reports rather that it may lead to endless contests and games for hierarchical positioning and power (e.g. Dalton 1950, 1959). But at least two diverse learning modes have become institutionalized to contest each other within the corporate bureaucracy. In a similar manner Nelson and Winter (1982) see the introduction of the R&D lab above the technical staff as the introduction of a third set of routines that by leading to new products and processes, changes the agenda for exercising routines among technical staff and operators, building heavily on Schumpeter (1970), which saw the coming of the industrial lab as the routinization of the entrepreneurial function and thus leading to a partly demise of the capitalist civilization. Yet, the introduction of R&D labs though evoking eventual disturbances in the routines below – that is among technical staff and operators – may itself follow a rationalistic deductive process, which can be seen as third form of single-loop learning (Weick and Westley, 2006: 447), especially if becoming self-referential as with the “not-invented-here syndrome” that became frequently observed by US management researchers in the late 1970s (Utterback, source), emphasizing that each bureaucracy evolved a certain way of developing new products, a way that they resisted being disturbed by external actors or even kept secret.

The coming of such forms of organizations in many ways changed the field – as observed by Schumpeter. Now it was much more difficult to enter either politics or business without the backing of a large organization, and both democracy and markets were inhabited by large organizations rather than civilians with novel ideas or direct producers with a novel product. Creative destruction and political reforms came about in very different ways than during early capitalism.

In the US in particular, technical staffs and line managers exercised their joint efforts by separating individual jobs and associated routines as much as possible, both to be able to work systematically with the constant refinement of routines and to pay according to effort by individual employees. At the factory floor this was achieved by building up buffer stocks between operators, so that the failures of one would not influence the performance of another, and technical staff could concentrate on improve or automate discrete work-operations and probably also avoid the cultivation of learning modes among operators.

In a similar manner R&D-projects were decomposed into individual and discrete work-tasks, managed by a flow chart, and an individual engineer's contributions remunerated accordingly – both concerning pay and recognition. Finally, by the continuous expansion of American corporations, the M-form (Multidivisionalized) form of cooperation was formed and to avoid the influence of vested-interest on corporate strategies and allocation of financial means, headquarters were deliberately separated from the learning going on in divisions and became oriented towards investing financial means as if an external financial institution (Freeland, 2001). In many ways the learning potential of the organization as such were rather seen as a potential for opportunism, shirking and free-riding and a lot of creativity went into finding ways by which the "principal" could control the "agent", making hierarchical lines of reporting and communicating awesome experiences.

In many ways this way of organizing and learning formed an ideal way of progressing after WWII, where mass-production and Keynesian state-regulation of demand institutionalized a growth pattern of more of the same. International organizations after Bretton Woods, set up initially to safeguard this regime from being undermined by nations that tried to grow at the expense of other nations, crowned the order. However, as internationalization progressed, consumer demands became more differentiated, more industrial nations started to contest the position of the US and markets became more volatile after the first oil-crisis, this accumulation regime (Aglietta, Ibid) and its way of organizing and learning evolved into a severe crisis of stagflation and great trade-imbalances (Piore and Sabel 1984). To the effect that the way of organizing business, the demand stimulating interventions of the state and the role of international institutions all were called into question.

The position of public authorities and private firms to mitigate uncertainty has changed in recent decades. The decentered multinational corporation has become more like a search engine than a library in its bureaucratic form (Desai 2008). Transnational business communities are actively engaged in articulating search mechanisms as a means of finding innovation (Saxenian 2007). They have also engaged in active searches for transnational identity formation to creates networks not reliant on more silo-like national corporations or professional associations (Faulconbridge, Muzio and Cook, 2008; Djelic and Quack 2010, Seabrooke 2014). These initiatives have been based on finding ways to learn in an environment of perplexity and flux.

Public authorities and institutions have been slower in developing their own learning and search systems. Behavior during the recent financial crisis provides an example. Zeev Rosenheek (2012) has analyzed how the American Federal Reserve System (FED) and the European Central Bank (ECB) as an authoritative epistemic community engaged in such a struggle and enquiry from 2007 through 2009. While at first they diagnosed the situation and troubles as “passing and confined incidents” implying that it was “a circumstantial and quite normal situation well known in financial markets”, they would a little later diagnose the situation as one in which “financial markets were in fact experiencing an unsurprising and healthy process of correction and readjustment through reassessment and repricing of risk”. By the end of 2007, however, when the market disturbances and re-adjustments proved to be more persistent and severe, “the diagnosis of the events began to point to significant difficulties in the functioning, or even collapse, of some of the institutional foundations of financial markets” as they came to see the troubles of financial markets as the result of the fact that buyers and sellers were unable to discover prices for a broad range of financial products due to disruption of information. Now the situation was not seen as a healthy correction but rather to be very violent and dangerous as it turned out to be “a solvency crisis of major financial institutions with risky systemic consequences” that could not be solved by the functions of markets alone.

Causal accounts also shifted during this struggle of inquiry. While the FED and ECB never confined troubles to American mortgages alone but to the entire system. At first causalities were located in the “specific actions of actors … highlighting their misbehaviors and misjudgements” that led to too lax standards in credit underwriting, but then causalities widened in scope to attribute to the financial system a general tendency to “overconfidence, complacency and even imprudence, which led to massive underestimation of risk and overleverage across financial markets”, which was partly rooted in increasing short-termism and employment of inadequate models and procedures for liquidity and risk assessment that could not cope with the innovative financial products that had evolved from the 1990s, and where credit rating agencies had proven to be playing a less than satisfactory auditing role. But the search for causalities did not stop there. The working of the financial system was seen on a wider background in which global imbalances in current account positions and capital flows across major economies that had emerged in the 1990s with emerging economies becoming net suppliers of funds to international capital markets and creating a “global saving glut” of cheap finance was seen to play a major role. Together the saving glut and the intensive process of financial innovation was seen as being at the root of the crisis and to having created a system in which speculative financial activities and their growing disconnection from the real economy undermined the very economy that the financial system was thought to be governing (see also Wigan 2010). The implications may turn out to be far-reaching:

> These coherent and detailed diagnoses and causal accounts touched upon some of the most basic attributes of global financial capitalism as it developed in the last decades, carrying with them the potential

> for helping to open up the political space for reevaluation of some of its ideational underpinnings, such as the notion of self-regulating financial markets and the unproblematic commensurability of financial risks. These sense-making frames did not represent an overall rupture from the premises of the neo-liberal mode of governance; yet, by qualifying them and calling for their reconsideration, they undermined to some extent their hitherto hegemonic status among dominant actors in the global political economy (Rosenheek 2012: p 22-23).

An interesting aspect with this movement and struggling inquiry is that it passes from a momentary and short term kind of doubt almost to institutionalize doubt towards the actors that were seen to cope with and engineer the smooth functioning of the neo-liberal order among the acclaimed protectors of that very order, the politically independent central banks.

But this way of learning to act in a new setting, taking on a new role and ascribing a new role to financial market actors, is not an easy one. First, the very innovativeness that were the internal drives of financialization and securitization during the 1990 and led to cheap financial products that allowed for financing 'myriads of projects" for both private firms and households, are also at the epicenter of the problems encountered in the financial crisis and which are basically outside the control of central banks, not to speak about the financial markets as many of these products were over the counter and tailored for specific customers (Morgan 2010). Second, the central banks saw themselves as previously governing a system from a focus on inflation rates and as securing that all limits to the self-governance of markets by markets were uninterrupted by the body of politics. It was this neo-liberal orientation that legitimated and served ideationally to give both the central banks and the financial system its autonomy and privileged power position in the age following the Fordist/Keynbesianism crisis and spurred the rapid globalization process. If central banks call into question the self-regulation of markets by markets, the financial institutions will lose some of their autonomy and privileged positioning, and the central banks may engage in regulatory maneuvers that would endanger their own autonomy and independence of political influence – in much the same way that it happened in the aftermath of the 1920s and 1930s crises of capitalist economies (Ahamed 2009).

THE SEARCH FOR, AND DISCOVERY OF, NEW MODES OF LEARNING.

The break up of the old order of visible hands and governance of the economy by the state has happened on many levels. Ideologically it has meant a return to markets instead of plans. In terms of location of powers, the redistribution have moved from state-bureaucracies to financial institutions, creating a complex nexus believed to govern (and to "civilize") the economic dispositions of corporations and states. It found its forms in a mixture of corporate governance directed towards shareholder value and New Public Management intended to make public sectors more productive and help reduce the size and social space of the state.

Underneath these ideological and political discourses and changes on the principles of social organization, a huge restructuration took place. Though corporations tended to grow in terms of market-value, turnover and network of subsidiaries, they were simultaneously disintegrating by outsourcing activities and off-shoring much of what had until then been integrated into internal value-chains, controlled and coordinated by hierarchical organizational activities. Corporations became transnational, value-chains became global, and the previous modes of organizational learning were called into question.

As has been vividly analyzed by Herrigel (2010: Ch 7), under these new conditions every organizational unit are under a permanent competitive pressure to constantly redefine its role in the larger division of labour, to make the best out of the resources that it can gain from collaborating with other organizations and by constantly redefining the job-sets and working roles that constitute itself as an entity. These changes also implied a shift in the locus of knowledge production and learning. Until the early 1900s researchers (and practitioners) mainly focused on knowledge production and learning in formal organizational arrangements. From that time and onwards focus was extended and interest increasingly shifted to the informal and personal networks as important vehicles for creating, retaining and sharing knowledge and for facilitating learning in and across various communities of practice at the day-to-day level of work (e.g. Lave and Wenger 1991).

Inspirational for making these changes have been Japanese forms of organizing both internal learning processes of Japanese companies and the way they collaboratively improve across boundaries between OEMs and suppliers. Horisontal interaction among teams, originally organized through quality circles, within firms such as Toyota, and a number of cross-organizational institutions to support improvement and learning across firms in networks, have been inspirational for creating a new learning mode, that is monitored in a highly different way than was the old mode (Sabel 1994; Aoki 1990).

A first principle in this form of organization is to discover when business units or teams are not interacting in an efficient way. Where the former system tended to insulate various activities to improve them separately, for instance through buffer-stocks, the new regime tries to make bottle-necks and interactional problems between entities visible. Whereas the typical American corporation would tend to be run by less than 80% of capacity to avoid bottle-necks, Japanese would be run beyond 100% capacity utilization to discover such bottlenecks or inconsistencies. The consequences of this way of organizing were much steeper learning-curves so that in this form of organization it is much more easy and more effective to shift among production tasks and to re-compose the role of the firm or the working teams accordingly with taking on new roles in the larger worldwide production system.

Visions of “lean” production combine these basic traits with *Kaizen* or continuous improvement, so that organizations are constantly experimenting with ways to do things in such a way that all and everybody are consciously

searching for new ways of doing things and ways of doing new things in a better way. Just in time production, can-ban and simultaneous engineering instead of sequential engineering are examples of such novel organizing methods that make early discovery of weaknesses and problems possible, so that weaknesses and failures are diagnosed more easily and analyzed more carefully, for instance by searching for root-causes to diagnosed problems (Helper et al 2000).

Sabel (2006: 107-108) has characterized the emerging organizational form after 1980 in contrast to hierarchy as:

> …federated and open. Decisions of higher units are shaped by lower ones and the lower units can be formally outside the organization. Or, to capture the idea that information in the new organization flows up and down as well as sideways, organizations are said to be networked. General designs are set provisionally by the highest level in light of proposals by internal and external 'lower' level units responsible for executing key modules or subsystems. The organizational routines define methods for choosing provisional, initial designs and production set-ups, and revising them in the light of further review and operating experience. Collaborators are rewarded for achieving broad goals according to standards defined as part of the process by which the goals themselves are set. Rule following entails – paradoxically, given the older understanding of compliance – the obligation to propose a new rule when the current one arguably defeats its purpose .

This form of multipolar organizational form outperform hierarchies in volatile environments, is found within both private and public sectors, and seems to emerge in highly differing settings (Japan, the US, Denmark, Ireland) and has been seen emerging in international organizations. To speak of a generic form is, however, either premature or perhaps impossible, as it may emerge in many different ways in different settings, and may always prove to be tentative and transitional (Ibid).
At its roots this form of organization is not characterized by its operating routines, but rather b its preparedness to raise doubt about current routines, such that what Sabel calls 'revolutionary routines' becomes institutionalized throughout the entire organization (Ibid). At an ontological level this preparedness for doubt stems from being convinced that the environment is volatile and changing in ongoing and unpredictable ways and that current templates and rules of thumb may prove wrong within a moment. At a paradigmatic level it stems from being convinced that mental frames are indeed mental frames, and that doubt and self-doubt needs to be organized so that what we do and how we do it can be constantly called into question. At the level of social-psychology it is as if we have moved from a stage, where the organizing elements were in support of "taking on the roles of others and form '*Me'*s" while they are now more oriented toward stimulating the "taking of '*I'*s against '*Me.*s" (to use Mead's (1967) expression) and to form various forms of reflective communities of '*I'*s that can detect reasons for doubt, diagnose problems and limitations and explore root-causes of problems and self-limitations to engage in deliberation and co-creation over novel products, processes and re-design of organizing principles. Weick and Westley (2006)

calls such organizations for Self-Designing Systems and characterize them by self-diagnostic capacities that are capable of critically examining key assumptions, beliefs, tasks, decisions and structural issues; organizing routine-interaction with the task environment to generate information about ways to improve performance; organizing routines that generate improvements rather than simply encode improvements in routines; cultivating doubt and looking at one experiment as one that will suggest new experiments; and by doing less filtering and absorption of uncertainty. In short such organizations know that they are arbitrarily punctuating experience and are always and everywhere trying to improve their ability and readiness for re-punctuating, they are not doing learning I but opting for learning II (Bateson n1972) that is searching for still better ways of learning to learn. A key assumption underlying our argument so far is that distinct forms of organizing call for distinct forms of learning and vice versa. Learning at work is, in other words, shaped by how the work is organized, of what people need to do in order to accomplish their work, of how they organize and mange their activities and the material contexts of which they take part. Building on this assumption, it is our argument that due to the last decades radical changes towards a more and more 'globalized' and distributed world of work and organizing, current learning theories lack explanatory power accounting for how knowledge collaboration and learning relationships emerge and flow in distributed organizational contexts.

TOWARDS A FRAME FOR EXPLORING MULTIPOLAR LEARNING ORDERS

Over the last decades, the demands of the knowledge economy and the expansion in the use of information technology have made 'distributed organizing' – i.e. the capability to operate and collaborate effectively across temporal, geographic, political and cultural boundaries (Orlikowski 2002) an imperative for more and more companies. This has resulted in a significant growth of interaction and collaboration, not only within companies but also across them, through elaboration of e.g. complex supply chain, alliance relationships, collaborative communities (Dorf & Sabel, 1998; Hecksher and Adler, 2007), or networks (Powell, 1998, Lasse F H?) premised on various forms of knowledge collaboration and (opportunities for) mutual learning relations (Grabher and Ibert, 2014). Expanding Orlikowski's notion, we therefore argue that concurrently with companies' growing global operations, not only organizing but also learning needs to be distributed. However, while 'distributed learning', empirically have become an important competitive asset, our current learning theories offer limited insights into the nature and workings of the dispersed learning orders characteristic of today's global work practices. One reason for this is that they primarily focus on socialization, harmony and proximity as key ingredients of learning. Our intention in this volume is to take issue with some of these limitations in order to develop a more differentiated and empirically adequate view on how learning actually unfolds in global work arrangement. We do so by introducing the concept of multipolar learning as a sensitizing frame to address not only the distributed, but also multiple and often polarized relationships constituting today's global learning processes. We define multipolar learning as the capability of making inquiries and sharing

knowledge effectively in social practices that are distributed across multiple and polarized organizational, temporal, geographic, political and cultural divides. Such a conceptualization allows for an exploration of how actors in both public and private fields experiment with organizing and governing multipolar learning communities. That is, communities of inquiry that are becoming increasingly geographically distributed and encompassing interaction across various types of boundaries and constellations of collaborators that are not always co-located, but often spatially fragmented, socially distanced and heterogeneous in character.
The concept takes its point of departure in social learning theory, which understands learning (and knowing) as both the process and result of participation and engagement in social practices (Brown and Duguid, 1991; Wenger, 1997; Gherardhi, 2000; Easter Smith, 2011; Elkjær and Brandi; 2011). It seeks, however, to overcome three limitations or 'blind spots' identified within the tradition – in particular related to the concept of communities of practice (COP) (Lave and Wenger 1991, Wenger 1998, Wenger 2000). These are a bias in favor of socialization, harmony and proximity as key ingredients of learning. Our argument is not that the three ingredients do not matter, only that these biases blind us from understanding how also categories such as inquiry, conflict and distance may have equal relevance for understanding current (and future) learning relations (their barriers and dynamics) within global work contexts. In this way, the concept of multipolar learning is by far a rejection, but an elaboration of and constructive contribution to the extant literature on social learning and knowing in organizations.

The first blind spot within social learning theory is a very broad (and hence vague) conceptualization of learning where the actual learning processes and concrete learning mechanisms are treated as a 'black box' (Elkjæer 2000). To define learning as something that takes place when people participate in and across communities of practice (or other social settings) the phenomenon becomes omnipresent and thus resembles the very process of socialization or participation in life. For instance, Wenger repeatedly describes learning as the act of living (Wenger 1997, 2004). Consequently, learning tends to cover everything and nothing at the same time and therefore questions of how people actually learn through participation and what triggers learning becomes genuinely difficult to explore from a strictly social learning perspective. According to a pragmatist perspective (Pierce and Dewey), it is not just participation and socialization, but problematic situations that trigger people's ability to inquire and hence their ability to learn and re-learn from experience (For a good discussion of this point see Elkjær 1998, 2000, Shustermann 1999). Inquiry is in other words triggered by situations of doubt, (i.e. facing a situation that is uncertain) and it is thus the very situation that makes a person stop, feel, think, act and think again. Conceptualizing multipolar learning processes within such a frame gives better leeway to investigate the actual situations (moments and places) of uncertainty (e.g. how to handle a certain problem at the production line or solve a compliance issue) that move organizational people to act, think and learn in new ways (e.g. to search for smarter and better ways of tackling a problem at work) while participating in and across local as well as global (distributed) organizational settings.

The second blind spot is to see learning in organizations as something that is mainly harmonious, consensus-based and non-conflictual. In this construction, learning is seen as a fairly harmonious trust-based form of adjustment to the community of practice (e.g. Wenger 1997). Such a perspective makes it difficult to explore how also power, heterogeneity and conflict may be central to learning and the creation of new knowledge in organizations. One decisive problem with this view is that learning processes tend to reproduce the existing ones. From a symbolic interactionists/pragmatist inspired viewpoint, conflict or opposition are forms of interaction that to a greater extent allow people to continuously question, reflect upon and eventually re-define existent practices. The argument goes like this: According to Georg Simmel (1971), conflict is a basic tension between contrasts striving for the same object. He stresses that it is misleading to view conflict as an obstacle to unity, contrasted to harmonious interaction. This is because not only harmonious collaborative relations, but also conflict is a form of sociation designed to resolve opposing dualisms. Simmel's point is that people prove their strength consciously through situations of conflict (e.g. negotiating meaning between opposing worldviews or logics) in which they become aware of their reciprocity to conditions. This form of interaction enables them to reflect upon and be aware of 'the other' (cf. also Mead 1934) as well as their own capabilities (and self). Participating in such 'provocative' and 'corrective' relations, we argue, reflects a learning process quite similar to Dewey's understanding of learning as inquiry triggered by problematic situations. Due to its inherent tension between contrasts, conflict always rests upon a situation of uncertainty that spur processes of inquiry into existent practices and thus creates the basis for new (learning) experiences. In this light, it is namely the 'provocative' element of conflict – the opposition between diverse poles - that enables reflection upon former actions and practices in order to anticipate further consequences act and think differently – that is to learn in new ways. Consequently, learning through conflictual and heterogeneous relationships not only tends to reproduce the existent, but opens for new experiences and change of habits. Learning is, within this view, not only nourished in communities that are homogeneous and cohesive, but also through conflictual, opposing and heterogeneous relationships. Approaching learning from such an analytical starting point makes it possible to study the various types of both cohesive and conflict-based interactions that facilitate multipolar learning in local and global communities.

The third blind spot is a tendency to see learning as inextricably tied to the notion of proximity and homophily. As most learning theories have been developed at a time when global interaction, and in particular global work, played a less significant role than today they tend to be biased in favor of proximity, the local unit, and face-to-face interaction as the key building blocks of learning. No doubt these components are crucial for learning. However, it is our argument that such a bias may limit an understanding of the more globally distributed and interdependent learning activities within current organizational contexts. According to seminal theoretical debates, learning as engagement in communities of practice is always situated in a shared local context (e.g. Wenger 1997; Knorr and Cetina 1981). Also within innovation studies proximity has been seen as important for facilitating interactive learning and

innovation (Thune 2009; Kirat& Lung 1999). The basic argument is that being co-located stimulates frequent face-to-face interactions and through these, great learning opportunities occur. This emphasis on the role of physical and relational proximity for the cultivation of mutual understanding and cohesion is also persistent in traditional community conceptions (e.g. Nisbet 1970 and Bellah 1996). Yet, as Grabher and Ibert (2014) stresses, although a shared practice provides the preconditions for those interrelating activities that trigger learning in a community, it need not to be the result of socialization (or inquiry) in a context of physical co-location, but rather of collective heedful engagement (Weick and Roberts, 1993) with similar but physically distanciated material contexts (p, 114). From such a perspective, learning may also nourish through communities of practice that do not rely on a shared local context (Broome and Seabrooke 2015). Furthermore, work in organizational sociology and political economy often assumes that learning and consensus formation takes root when those involved are more similar (Campbell and Hall 2009). Here 'network imprinting' sustains communities, be they personal or corporate, not only through proximity but also by being alike (Marquis 2003). The association of learning with homophily has been examined in networks and found to be important in the creation of local teams (Dodds, Watts, and Sabel 2003; Ingram & Morris, 2007), while others have found that 'intrepid brokers' who have a good social footing but are willing to expand across networks are more likely to have 'good ideas' (Burt 2010). We question the strength of proximity and homophily as preconditions for learning, especially in transnational environments where distance and diversity play greater roles.

Consequently, the concept of multipolar learning does not point to one locality or implicitly favors proximity as the central loci for learning. Instead it aims to address learning relations that cut across local divides and which do not always imply face-to-face encounters within organizational contexts. It does so by studying learning as a product of the interactions between a multitude of (sometime geographically distributed, sometime co-located) organization members and their situations – thereby taking into account the diverse (and mulitipolar) shared practices, voices and interests that characterize the recursive learning landscape of globally dispersed organizations. Framed in this way the concept of multipolar learning serve as a lens for studying the empirical manifestations and workings of the new emergent learning orders of both proximity and distance.

Taking these three blind spots into account, the concept of multipolar learning seeks to develop a more differentiated view on knowledge collaboration and learning in global work arrangements by appreciating inquiry, conflict and distance as 'ingredients' of equal epistemological relevance vis a vis social learning theory's traditional emphasis on socialization, harmony and proximity as key for learning in COP. Such a take on learning is able to analyze how organization members may learn not only through mere participation, but by way of actively making inquiries into their shared practices triggered by problematic situations, how they learn through both harmonious and conflicting relationships as well as how learning may not only rely on a shared local context, but can take place in also spatially fragmented and multipolar communities. In this way, the concept offers a frame to analyze the everyday

situations and practices through which companies experiment with the organization and governance of multipolar learning communities.

Multinational organizations should in principle have a better option for organizing self-generated doubt and governing multipolar learning communities. For example Multinational Corporations can organize for comparing performance among subsidiaries in different countries and by so doing detect and diagnose why performance is different among subsidiaries, search for causes and learn to improve by comparing solutions. In this way, they can institutionalize reflexive communities of ongoing inquiry across distributed and multipolar divides. Yet, though the potential is promising, the literature seems to indicate that progress towards such new forms of organizations is difficult and filled with complications (sources). In a similar manner international organizations as the OECD, the World Bank, IMF and the EU may generate and compare bench-marks that allow for similar forms of learning among entire countries. Over recent years the Open Method of Coordination has been investigated from such a perspective (sources), which has been providing both knowledge of important institutional conditions and organizational pitfalls.

Many multinationals are indeed engaged in trying to develop organizing practices and governance systems, which enable the learning and diffusion of practices across different parts of the firm. Such systems call for recursive learning relationships of both proximity and distance. This is, as said previously, dependent on the idea that local actors are given the skills and autonomy necessary to revise and reform their own conditions of work in order to improve products and services. Research shows, however, that lessons from what has been learned in one team in relation to a project or in meeting improvement bench-marks do not automatically diffuse to other teams or across subsidiaries located in different countries. The danger is that whilst local teams may be highly responsive to local problems, the organization effectively uses a great effort to invent the wheel over and over again, or even worse, provide customers with products and services and fulfill continuous improvement contracts with customers in ways that may be far below best possible practices, a way of operating that does not improve their international position at full potential.

Thus at numerous levels multinational corporations and international organizations have engaged in a search for new monitoring systems. Within individual subsidiaries or affiliates they experiment with the formation of improvement-teams that assemble members from operational teams that are in charge of specific improvements (e.g. in firms team-leadership, quality, logistics, health and safety, environmental issues, customer relations, etc) to discuss, diagnose and explain comparative performance differences. This work is rooted in a new system of reporting associated with what kind of improvement aims that the subsidiary is following, and the improvement teams uses this as material for finding and constructing interventions that will solve problems and reach aims. Experimental interventions are then monitored and in the light of learning and assessment, the material is used to both revise ends and means in order to calibrate aimed at benchmarks.

Typically, such improvement-teams are constituted by both collaborative and conflictual bonds.

To take this endogenously developed governance system to a multi-site level, as in the case of multinational companies or international organization, the organization need to set up an analytical capacity based on worldwide information on performance metrics, so that it can be identified which subsidiaries and countries show low and which show high improvements in performances. By assembling representatives of operators and managers from a variety of subsidiaries, the group then engages in diagnosing problems and investigating the solutions that the seemingly successful have come up with. This investigation leads to the formulation of a cook-book like representation of best practices, which triggers a global teaching campaign during which the best practices are taught to the relevant parties across subsidiaries. Even during this teaching campaign, teachers may be confronted with alternative suggestions for improving practices, but especially after the campaign the diffused practices are only seen as targets on top of which further improvements may be argued, and after assessment, the new improvements may enter into the cook-book as revisions of best-practices. The study of the emergence of such governance systems is in an initial phase, and it is too early to say what forms their organizational architectures will take, but they seem to reflect in many ways to the elements and procedures that Sabel and his associates has identified as necessary ingredients for making a system for experimentalist governance (e.g. Dorf and Sabel 1998; Sabel and Zeitlin 2010).

Thus if we return to the introduction of this working paper, it is by no means sure that the serious self-doubt that emerged within core-players of Central Banks in the aftermath of the financial crisis, will also lead to improved capabilities for central banks to learn to learn by working together in a multipolar way, rather than, as they did in the past, impose a general rule of thumb on each other, a rule-of-thumb that were rooted constantly in a general free-market-ideology and held in discipline by international finance.

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