32nd International Geographical Congress 2012

Key Topic:

Global Change & Globalisation

List of Session Abstracts

Session: Analyzing climate change and its impacts via method combinations

Chairs: Jan Cermak & Jörg Bendix

Abstract:

This session aims to explore climate processes and impacts using combinations of methods, including in-situ and remote-sensing observations, statistical techniques and numerical models.

Climate change is both a result and a driver of changes in societies and ecosystems. In recent years, the amount of observation data available to characterize the climate system has increased rapidly, along with the number of numerical models addressing climate changes and impacts. There is a vast and largely unused potential in combining new and existing methods to better characterize processes, changes in their spatial and temporal manifestations, and interactions of systems. This session is intended as a platform to connect climate-related methods and data from various geographical perspectives.

In particular, contributions are encouraged that show how method combinations can be used to bridge temporal and spatial scales in characterizing climate change, to improve climate system understanding, and to link the climate system to processes in other parts of the natural and human environment. This may, among others, include model evaluation with in-situ and remotely-sensed observation data, regional scaling of model output and observations, and combinations of physical and social models.

Session: Bridging the gap? Scope and limitations of practice-oriented development studies

Chairs: Juliane Dame & Thomas Lennartz

Globalisation and global change modify political, social, economic and ecological interrelations and create new challenges – particularly in countries of the "global South". Issues include, among others, "natural" disasters, resource scarcity, and global food crises.

New actors (e.g. philanthropic foundations, private companies) have started to engage in the "development business" and diverse forms of collaboration are put into action (e.g. budget support, South-South cooperation). Against this background, researchers and practitioners have called for bridging the gap between theory and practice to find alternative approaches to the emerging themes.

Although geographical development studies aim at informing policy, the dialogue between scholars and practitioners remains contested. Only in few cases it has resulted in the refinement of concepts and methods (e.g. livelihood approaches, PRA). At the same time, development agencies increasingly support student projects and applied MA- and PhD-level research.

The session focuses on potentials and limitations for linking research results with demands of practical work and discusses the mutual and often conflicting expectations. We invite researchers and practitioners to share their experiences and insights on complexities encountered as well as best practices. Papers may address the following questions:

- Concepts: How can the expectations on synergies and transfer of knowledge between theory and practice be met?
- Methods: Which methods or conceptual approaches are entry-points for collaborative activities?
- Experiences: What lessons have been learned from projects which successfully bridged the gap between research and development cooperation?
- Dialogue: Which factors facilitate or limit dialogue and collaboration of scholars and practitioners?
- Perspectives: Which implications for practice-oriented research result from the post-development debate?

Session: Central Asian ecosystems under water scarcity

Chairs: Bernd Cyffka & Ümüt Halik

Many regions in Central Asia suffer from water scarcity at least outside of the mountain regions. Recent developments and the regional climate chance focus on water management and other actions to handle the problems and to secure the future of human population in this multi ethnical region. Often the natural ecosystems have taken a back seat, while food and water security play the major role. This is of course reasonable, but often the natural ecosystems, especially riverine

ecosystems, form the backbone of the traditional life of the people because they build the natural lines for settlements and trade or even areas for rural subsistence.

The proposed session should focus on these ecosystems and their current and future problems especially under the effects of global chance and an increasing water demand of a growing population. What are the present conditions of these ecosystems? What are the most endangered ecosystems? Can these ecosystems be protected or remediated (if necessary)? What is the role of local and/or national authorities or other stakeholders in this region? Is a cross-border co-operation possible? Can traditional water management systems help to ensure the continuity of vulnerable ecosystems?

The objective of the session is to reveal which different kind of endangered ecosystems exist, and what the main threatening processes are. As a benefit common actions for protection and preservation in this region can be concluded and recommended.

Session: Challenges of climate change for urban infrastructures

Chairs: James Mc Phee & Helmut Lehn

Abstract:

Cities are highly dependent on their hinterlands for natural resources (e.g. energy, water) and as repository for their residual products (e.g. waste, sewage). As a consequence of climate change many regions of the world will face more extreme weather conditions (rise of temperature, extreme rainfall events, droughts and strong winds). This means changing requirements to the performance of urban supply and discharge systems. Increase or decrease in population poses an additional challenge on the reliable functioning of existing urban infrastructures. The aim of the session is to show on one hand the impact of climate change on the urban infrastructures with regard to their function within the city and as far as the linkage between the city and its hinterland is concerned. On the other hand examples should be given how urban infrastructure could be made more flexible in order to deal better with global change processes and to secure the urban metabolism.

Session: Climate change mitigation from global to local

Chairs: Rüdiger Glaser & Fabiana Barbi

Abstract:

The objective of this session is to discuss how climate change mitigation is governed on different scales and which actors are involved. As the impacts of climate change occur on all scales, climate change mitigation can be characterized as a multi-scale challenge. It is obvious that a contribution is also needed on a regional and local level in order to meet the global targets of the Kyoto protocol. Furthermore, the actors exercising governance will be addressed when a climate change policy is being developed, using examples from both industrialised and newly industrializing countries. Thus, the session deals with the question how climate change is being framed by regional and local governments in terms of policy strategies and instruments, and how these responses are linked to climate change policy.

In many countries, local governments operate on a horizontal level with a limited scope of action and no mandatory local climate change mitigation in place. It will be discussed why forerunners of local climate change mitigation evolve under these conditions at all. In this context, the role of actor networks initiating and supporting local climate change mitigation will be analysed. The question is whether and how these actor networks get involved in decision-making processes.

Networks dealing with the consequences of climate change evolve not only horizontally within the same scale but also across different ones. Transnational city networks such as ICLEI, Energy Cities and the Climate Alliance get increasing attention. In some cases, they even bypass the national level. The role of these networks in climate change mitigation is to be discussed.

Reviewing the proposed interdisciplinary subject, contributions working with innovative analytical methods and subjects, even beyond geography, are particularly appreciated. Young researchers are encouraged to join the session.

Session: Critical junctures of globalization – Re-spacing globalized living conditions in contexts of rupture

Chairs: Sebastian Lentz & Ingo Breuer

Abstract:

This panel explores the multiple interrelations between globalization's critical junctures and everyday living conditions in both the Global North and South. Critical junctures of globalization are understood as specific process bundles in space-time by which spatial orders are being ruptured, renegotiated, transformed, and created anew. Most significantly, these ruptures and re-negotiations are related to shifts in how resources are allocated and power relations are re-made, thus resulting in massive repercussions on the materiality of concrete living conditions. By focusing such restructuring in space and time contributions to the session should lead attention to places, regions (hot spots) and actors which undergo and/or promote such critical changes to globalized conditions (tipping points also in a temporal interpretation).

The panel focuses on how these critical junctures are reflected and enacted in globalized ,arenas' of everyday lives, in contexts where major ruptures and re-negotiations occur. Four interrelated directions of enquiry should structure the panel's debate

- (1) Productions and (re-)negotiations of spatial relations, focusing on the making and unmaking of spatialities as embodied in new mobilities (and immobilities) of persons, commodities, and ideas/concepts, as well as in concomitant processes of bordering and de-/re-territorialization
- (2) Patterns and mechanisms of resource re-allocations, investigating how critical junctures are intertwined with spatial/temporal shifts in resource access and power structures
- (3) Shifts in globalized living conditions, exploring how these changes are reflected in everyday lives, entailing processes such as livelihood deterioration, social in-/exclusion, marginalization, and the (un-)making of social security mechanisms.
- (4) Globalizing social and cultural action, assessing how such changes yield new forms of social/cultural action, activism and resistance, exemplifying new modes of how actors negotiate their positions in emerging socio-spatial orders.

We welcome papers that present theoretically embedded and empirically rich case studies from diverse empirical and disciplinary perspectives, regional foci and methodological approaches

Session: Current shifts in globalizing logistic networks, importance of distance and spatial implications

Chairs: Robert Scholz & Barbara Weig

Abstract:

Innovations in the transport sector are considered as the driving forces behind globalization. The existing transport network is anything but stable and underlies permanent shifts, causing both chances and risks: On the one hand, transport firms have to persist in global competition despite changing political, economical and technological conditions. On the other hand, regions and their development depend on a successful integration into the global transport network.

Economic geographers examine the importance of distance in the context of globalization for some years now. Notably with regard to the modern transport sector most discussants assume a decreasing relevance of distance – a 'shrinking world'. During our session we would like to discuss, to what extent current shifts in transport networks impact world economy spatially and vice versa. Are we really living in a "shrinking world"?

We welcome any scientific contribution dealing with current trends in different transport modes used in the transportation of goods (road, rail, air, sea, intermodal) and in the logistics sector (warehousing, goods handling). Possible issues are:

- 1) On which factors do the dynamics of logistic networks depend on
- economic development on different spatial levels
- logistics companies (strategy, structure, power, cooperation ...)
- politics (security, environmental issues, subsidies ...)
- 2) How are logistics companies able to define proximity and distance between locations?
- by optimization of global transport networks

- by improving technical production systems (engine, fuel ...) to reach sustainability
- by rationalizing (i.e. containerization) and specializing transport and logistics services (perishables, refrigerated cargo, express services ...)
- 3) Which consequences result from the growing importance of changing storage- and handling-procedures?
- configuration of the logistical value chain
- importance of (de-)centrality and proximity Other related (innovative) topics are also welcome.

Session: Digital Earth: an opportunity for spatial citizenship

Chairs: Karl Donert & Michaela Lindtner-Fally

Abstract:

In 1998, Al Gore presented a vision of "Digital Earth" as a globally complex, multi-resolution, 3-d representation of the planet to make sense of vast amounts of geo-referenced information on the physical/social environment. Many elements of this are now in place and used by hundreds of millions of people worldwide.

Given recent technological developments, it has been argued that Digital Earth should be an obligatory target for education (Gryl et al., 2009), integrating tools to allow citizens to ask more complex and socially relevant questions and encourage creative imagination and global communication.

Strobl (2008) developed the digital earth citizen concept, he argued that this is a role that every person should accept in order to participate fully in society. They should handle, interpret and critically reflect on spatial representations and communicate with them.

This session aims to explore the characteristics and potential of Digital Earth, the concept of the digital earth citizen and the significance of an Education for Spatial Citizenship (ESC). ESC is defined as developing learning and teaching such that the outcome is the critical appropriation of space by democratic means. It is about learning how to navigate the world physically, socially and politically. ESC characteristics are transformative, connecting with information and converting it to encourage communication.

Digital Earth: an opportunity for spatial citizenship will seek to present theoretical and empirical work, setting the stage for the appropriation of space by contextualising communication through media that uses the spatial localisation of information. Possible research papers include:

- a) the search for general principle
- b) competences for ESC
- c) impacts of spatialisation
- d) the media and tools concerned
- e) the impact of participatory and crowdsourcing approaches and
- f) the necessary links between education and society.

Session: Ecosystem services: its epistemology and relation to geography

Chairs: Xavier Arnauld de Sartre & Noel Ovono Edzang

Abstract:

The concept of ecosystem services (ES) and its application through payment for ecosystem services (PES) schemes has grown in importance in recent years. The ES concept, proposed by scientists during the 1990s, has been institutionalized and has acquired universal application through the process leading to the publication of the Millennium Ecosystem Assessment (MEA) in 2005. Today, PES schemes are being developed all over the world, particularly in developing countries affected by deforestation. PES schemes are considered innovative strategies to promote biodiversity conservation and to reduce poverty, as was reiterated recently during the Copenhagen conference. As it is used today, the concept of ES tends to redefine, through market mechanisms, the relations between people and the environment. As such, it should interest many geographers, as they put these relationships in the core of their discipline. Nevertheless, geographers are largely absent in debates over the definition and application of ecosystem services.

This session will address this situation by analysing the contribution that geographers as individuals and geography as a discipline had, have or could have in the assessment of the notion, its implementation or its critiques. We invite contributors to question – while keeping in mind the history of geographical enquiry – the epistemological and institutional bases of the notion of ecosystem services as they appear in the texts that develop the notion of ES or in the projects that apply it through PES. What assumptions and ideologies are behind the science of ES and PES? What is their institutional context? Where does geography – and where do geographers – fit into these elements? What can a geographical approach contribute to improving and/or critiquing these notions?

Session: Financialisation, marketisation and the environment: Towards 'alternative' economic geographies of finance?

Chairs: Hans-Martin Zademach & Jane Pollard

Abstract:

The global financial crisis sparked a renewed interest of geographers and other social scientist into the nature and the socio-spatial relationships of financial systems. So far, the growing body of literature on finance and financialisation has however paid only little attention to environmental and social concerns. But practices of financialisation and marketisation create serious consequences for the natural and social environment: The markets for CO2-emissions and derivatives for natural resources or the privatisation of water, waste and sewage management in municipalities are striking examples. Likewise, the provision of health and other social services is increasingly run by private / publically listed corporations, which are subject to external scrutiny through financial analysts, investors and traders. That is, the provision of environmental goods and social services has become narrowly tied to the forces of financial markets, their logics and marketised modes of governance. Against the backdrop of the financial crisis, these new modes of governance have been brought into question – a questioning, that has both an empirical component (how do these modes of governance work in varying political economic contexts, [how] can they be reformed?) and a normative one (are there alternatives?) and is thus offering fruitful avenues for context- and scale-sensitive geographical work. By means of following these avenues, the session aims to advance the discussions about 'alternatives' to concurrent capitalist relations and mainstream practices of finance.

Possible topics for papers might include, but are not limited to:

- Financialisation / marketisation and the environment
- Financialisation / marketisation and daily life
- Financialisation and social exclusion
- Responses to financialisation
- Business ethics in the financial industry
- Moral geographies and social banking
- Ethical / sustainable investments funds
- Geographies of 'alternative' economic and financial practices (Islamic banking, micro / sustainable / social finance, LETS etc.)
- Links between capitalist and alternative spaces of finance

Session: Focal points of the past - Historic-geographical Dimensions of globalization

Chairs: Klaus Braun & Jacqueline Passon

Abstract:

According to the German historian Sabine Höhler and the sociologist Willfried Spohn, most of the actual scientific approaches to globalization focus on present dynamics, ignoring historic backgrounds and changes with large-scale impact and influences on current Global Change. Thus the panel should concentrate on historic dimensions of globalization, regarding especially the connections and interactions between Europe, Middle East and the African Continent during the 19th and the early 20th century when expeditions like the one towards the source of the Nile came along with colonial and commercial interests.

One focus will be targeted on the Trans-Saharan trade between the Mediterranean and sub-Saharan Africa regarding the impact of important caravan routes like the famous Ghadames- Ghat- Kano and the Tripoli-Fezzan- Bornu routes through Libya. In addition to the historic conditions and remains along the caravan routes the attention will be turned to actual questions concerning relations, trade interests and migratory movements between the European Union and the southern neighboring countries.

Other topics are dealing with the cultural and structural heritage or conflicts over resources of European colonies in Africa, regarding the historical background and the impact of changes in the connections between former colonists and colonized countries like Libya, Tunisia or Tanzania. Welcome are contributions that examine the past two centuries as eras of Globalization. They illuminate any of those areas mentioned above as an example and show how these areas have been formed and used and how a new world order has been constituted. Your contribution may follow a historic-geographic approach, a critical geopolitics methodology or more recent approaches of environmental studies.

Session: Geography, complexity, and information dynamics: addressing real-world challenges of the new millennium

Chairs: Cristian Suteanu & Beate Ratter

Abstract:

We are facing a world that is increasingly characterized by complexity and interconnectivity on multiple levels. Complexity theory has a lot to offer for understanding nonlinear, dynamic systems in the context of human/nature interaction. As society and nature are nonlinear and dynamic, and composed of a multitude of agents, interaction on the micro level can lead to emergent structures on the macro level. This is particularly relevant for any management as well as planning activities. In fact, the multitude of agents ought to be included in analyzing, planning and management practices not only because of democratic reasons, but as well because they are fostering the outcome of management processes through their behavior and interaction. The importance of having scientific approaches capable of addressing these practical challenges is becoming more and more evident. Significant progress has been made in this regard in the framework of complexity science, often starting from geographical questions and leading to powerful methods for the field of applied geographical research. In its confrontation with complex practical problems, geography has radically transformed the way information is managed. It applies integrative interdisciplinary strategies designed to effectively describe strongly variable features in space and in time, and to identify relationships between subsystems on a multitude of scales. This session will focus on recent developments regarding real-world geographical applications, involving nonlinear science and novel approaches to information handling. We invite people who apply complexity theory in their ontological approach of dealing with analyzing and management tasks. Papers bridging theory with practical applications are particularly welcome.

Session: geo@web. Geography production and its lifeworld consequences in the era of the web2.0 Chairs: Inga Gryl & Tobias Nehrdich

Abstract:

Within the emergence and constant progression of the web2.0, spatial communication has gained new importance: Geomedia is more and more integrated into the constantly flowing stream of information in social media. Objects, events, and even persons are georeferenced. The "virtual reality" becomes an "augmented reality", closely connected to requirements and needs of lifeworld. At this, visualization of geoinformation, as a praxis of creating meanings of space, implies regionalization and accordingly the production of geographies. Due to new user-friendly mapping technologies, broad distribution of regional constructions remains not reserved to established institutions and clusters of experts any more, but is opened to everyone. A powerful lay-culture of geocommunication originates: Individual actors attach meaning to locations, and thereby produce their own geographies (while implicating questions of spatial privacy); dynamic communities with own hierarchies share, select, emphasize and ignore those interpretations of spatialities.

This everyday development is compatible with approaches of Critical Cartography and Spatial Citizenship to produce alternative spatial interpretations. It may lead to a broader acceptance of relational concepts of space, substituting traditional absolute mapping. This might bear chances for empowerment and new forms of participation in negotiation processes in society. However, facing the seeming arbitrariness of the geoweb, the human seeking for concrete (spatial) orientation could also lead to a renaissance of absolute concepts of space, legitimized by old and new authorities. Both tendencies have sequels for the production of geographical knowledge in everyday life, educational environments, and scientific context.

This session will give a panel to discuss the options for future research on the development and impact of the geoweb with respect to the change of spatial concepts and their consequences for our understanding of the world.

Session: Global change, criticality and tipping points: globalised trends, disasters and resilience Chairs: Alexander Fekete & Jörn Birkmann

Abstract:

Global trends such as environmental and demographic change, urbanisation, global economy, information technology and global communication offer both opportunities and risks. The complexities, benefits but also critical excess potential of events related to these trends become especially evident in case of crises or disasters that perceive global awareness: earthquakes, hurricanes, tsunami, nuclear crisis, economic crisis etc.

Dealing with tipping points and criticality of infrastructure is pivotal for identifying possible negative impacts on human health or the environment. However, crises also allow for new global developments and windows of opportunity for disaster resilience but also for sustainable planning.

The session invites contributions to the following aspects

- Global critical developments that have crossed a tipping point or might reach a tipping point in the future
- Increasing interdependencies between society, infrastructure and the environment in relation to infrastructure and disaster risk
- Criticality as a concept for identifying critical thresholds and tipping points
- Spatial 'tipping points': choke points, single points of failure, cascading effects and viral distribution in networks
- Time-related tipping points for disasters in socio-environmental systems: timing, speed of onset and duration of impacts
- Integrative and multi-sectoral resilience concepts
- Global impacts and perceptions of disaster impacts

Session: Global complexity: From theoretical thought to geographical evidence

Chairs: Christina West & Heike Egner

Abstract:

The session will focus on geographical work incorporating notions of complexity theory pointed out by empirical data. Chaos theory has shown that tiny variations of initial conditions can have strong and surprising effects, and that even systems with simple rules can show unpredictable behaviour. Consequently, complexity theory focuses on non-linearity and erratic processes, evading simple mathematical descriptions. Further, complex systems can form emergent structures, like society itself, which cannot be attributed or traced back to single actors or conditions.

In geography as well as in other disciplines, the analysis of the interrelation of society, individual and space is discussed controversially between linearity and non-linearity — especially with regard to the effects of globalisation. In the wake of complexity theory, it is proposed to change the \'linear hegemony' of rationalist causal thinking, that transcends in the most conventional dichotomies of social and geographical sciences like 'local—global', 'micro—macro', 'structure—agency', 'system world—life world' by thinking along the lines of non-linearity. Thus, the above mentioned scales are to

be replaced by heterarchical (instead of hierarchical) relationalities, mobile connections and networked or circulating relationships that necessitate a better understanding of causalities in complex systems.

In this session we will focus on spatial evidence for complexity theory. We want to bring together geographical contributions with examples from economy or politics in a globalized world that educe spatial and social paradoxes, asynchronies and excesses in various forms. Papers should address both the analytical integration of 'complexity' within the geographical theory formation and the consequences for methodical implementation. Contributions from a quantitative planning perspective as well as qualitative constructivist or conceptual approaches are welcome.

Session: Globalization and the re-making of rural place

Chairs: Birte Nienaber & Michael Woods

Abstract:

Geographical research on globalization has, until recently, tended to focus predominantly on urban settings, in spite of the significance of processes of economic and social globalization in driving change in rural regions. Research on rural dimensions tended to emphasize the integration of rural systems into global commodity networks and migration flows, with few studies adopting a place-focused approach. These two tendencies collectively reinforced the perception that globalization necessarily involves the disempowerment and exploitation of rural localities.

The global changes confronting rural areas produce a dynamic process with both opportunities and threats, empowering and disempowering, inclusion and marginalisation of people and e.g. economy, integrating local and non-local actors in the discourses re-making rural areas in times of globalization. In recent research, rural localities are sites through which globalization is negotiated, contested and reproduced. Although undeniably situated within new, global networks of power, "because the reconstitution of rural places under globalization rests on associational power, local actors [...] retain agency in shaping the circumstances and character of their enrolment" (Woods 2007: 502). This session invites papers that explore the re-making of rural places in the era of globalization, which establish the nature of engagement with and negotiation of change across a range of dimensions (economic, environmental, sociocultural, political), scales (local, national, global), interfaces (human and non-human), and locations (global north or south). Themes might be:

- Economic restructuring of dependencies and networks between rural and non-rural places;
- •Global environmental challenges, the re-making of rural human-non human relations;
- •New (global) migration flows, rural "melting-pots" and new forms of transnational rural communities;
- •Resistance to globalization, protest and strategies for asserting local distinctiveness.

Session: Is it possible to disentangle anthropogenic and climatological impacts on continental aquatic ecosystems?

Chairs: Mark Vetter & Arturo Sousa

Abstract:

During the last decades of the 20th century, nutrient concentrations in several continental aquatic ecosystems increased due to human activities in their catchment areas. This may be observed especially in aquatic ecosystems with catchment areas showing intensive land use activities, given their close proximity to major urbanizations. Management strategies to protect the aquatic resources play in many areas an important role for the functional capabilities of the ecosystems, for economic development related to agricultural land use, fisheries and tourism, for water consuming industries and in general for the health of people living from these water bodies. The long-term development of trophic conditions in aquatic ecosystems can be analyzed to study changes of trophic levels in relationship to land use activities. On the other hand, it is well known that an increase of air temperature associated with global warming could be observed in several study areas, especially in the Northern Hemisphere. In most of these areas, the possible impact for the future development of the ecosystems is hard to predict at the moment. Furthermore it is difficult to distinguish between anthropogenic and climate driven processes of these impacts, because both effects superimpose

each other. Additionally both processes have consequences on the trophic conditions of continental aquatic ecosystems. Therefore we would like to focus in this session on the challenge of disentangling the driving processes of this development. The efforts with regard to water pollution control in catchment areas are extremely important and have to be continued in the future. Nevertheless, there are also several indicators that climate fluctuations play a more and more important role for future aquatic ecosystems\' development. For this session we encourage to submit abstracts dealing with effects of climate change on aquatic ecosystems with the possibility to separate these effects from anthropogenic influences.

Session: Knowledge, networks and innovation in China's development

Chairs: Ingo Liefner & Susan Walcott

Abstract:

The upgrading and dynamic development of the Chinese economy continues to be based strongly on the extensive growth of exhaustible inputs. However, the government is aware of the disadvantages and now favors an intensive knowledge-based growth. Theory predicts that cooperative networks play a crucial role in the acquisition, creation, and dissemination of knowledge in the economy, and may also help create knowledge-centered development. Moreover, networks are related to space, either spanning international borders or confined to local settings. Interpersonal social networks in China, based on guanxi, form part of the observable network structure. It remains an open question, however, whether the history and current development of knowledge-related networks are triggering further imbalanced socio-economic growth, eventually increasing the urban-rural as well as interprovincial disparities, or helping to balance regional economic development. In this session, contributors are asked to discuss recent collaborative developments in high-tech industries, the future role of the public research sector for the science and technology system, regional innovation in China, and related geographic factors. Contributors may also consider the future role and function of Chinese firms in global value chains and their potential for playing an active role in the internationalization of domestic companies.

Session: Labour geography: Workers interventions in the global economy

Chairs: Martina Fuchs & Andrew Cumbers

Abstract:

Recent years have seen the deterioration in working conditions throughout the global economy. Set alongside this, there has been the growth of new labour movements, especially in Asia and Latin America, and continuing decline of established trade unions in Central and Eastern Europe. In North America and Western union, discourses and strategies of union renewal have developed in the face of ongoing decline in union membership and political legitimacy. Both conceptually and politically, there are some interesting interactions emerging between labour geographers and debates on Global Value Chains or GPNs. These are contributing new insights on changing working conditions and the influence of different economic actors (including labour) in 'upgrading' or intervening in broader global networks of production and exchange. Key issues surround the inter-relations between actors, practices, routines and institutional settings in shaping the varied geographies of economic globalisation. In this session, we want to discuss about how labour is organized, and how it changes. By examining the labour geography of place and by discussing how labour is spatially and socially organized, we can better describe and analyze different patterns of labour geography. We invite papers that deal especially with one or more of the following issues:

- Theoretical debates on labour geography
- Interdisciplinary approaches on labour studies
- Theoretical debates on GPNs and the international division of labour
- Labour movement and trade unions
- Sector or company studies
- International comparisons of labour movement and/or trade unions
- Effects of the last economic crisis on labour
- Aspects of labour movements with respect to firms, labour markets, learning capabilities

- Differences between "low tech" and "high tech" development agendas and the implications for labour
- Aspects of culture, gender, migration with regard to labour movements
- Policy approaches, labour activism and governance

Session: Management Geography - Embedding COPs in changing global urban networks

Chairs: Rolf D. Schlunze & Elmar Kulke

Abstract:

Management Geography is a relatively new approach, which evolved out of corporate geography or so called Betriebsgeographie and international management science. Relational embeddedness of managers and communities of practice are at the core of the discussion that constitutes this new approach with high practical substance for economic geographers and real world problems of managers. The actor-centered approach is based on locational adjustment and preferences, networking behaviour and innovation practices of international managers. In a globalized world managers need to pursue spatially fragmented strategies in order to balance cooperation and competition in different business settings. Recent transformations of the economic logic due to financial and technological breakthroughs but also to set-backs by catastrophic events caused shifts in urban hierarchies that call for an ongoing adjustment in management practices. We invite scholars to our special session on Spaces of International Economy and Management (SIEM) to present their research providing theoretical, methodological and empirical insights. Studies should include one or more of the following aspects:

- a) Theorizing management practices in space by approaches related to leadership, networking, corporate social responsibility of entrepreneurs and managers.
- b) Proposing new methodologies for investigating managerial practices and strategies, capability and capacities of changing agents in private and governmental organizations molding international spaces.
- c) Introducing empirical studies on the spatial expansion and community of practices (COPs) that contribute to the formation of new emerging communities in metropolitan spaces.
- d) Developing implications for local and regional policies on building international social capital enabling authorities to spur their economies.

Session: Mapping the emergence of change: future European perspectives

Chairs: Daniela Schmeinck & Karl Donert

Abstract:

In recent times the world seems to have been unraveling. Turbulent situations and accelerating instability are being experienced in many different locations. There has been an ever-increasing rate of change in human, economic, social, political, physical, climatic, educational and environmental perspectives.

Mapping the emergence of change aims to explore how geographers deal with these situations and consider what are the expectations and projections from a geographical perspective. Papers may also reflect on ways the early emergence of major forces creating these shifts can be tracked as the impacts of change are being ever more closely monitored.

This session will present new ways of understanding why change, in a geographical context, so often happens as quickly and as unexpectedly as it does. It is however not only the pace of change that is significant. The tools that are being increasingly used in these contexts to influence change, like geomedia and spatial networking, are also significant.

Mapping the emergence of change may include roadmaps of initiatives used to combat such pressures and offer viewpoints on the values and attributes of change and important linkages formed between the different components and conditions.

Mapping the emergence of change seeks to place a European perspective on geographical transformations taking place. Papers should therefore explore the tensions and vulnerabilities of change with a European dimension. They may ask questions like 'What are the critical points at which such a transition is triggered?'.

Session: Morphodynamic response to episodic disturbances of coastal systems

Chairs: Max Engel & Hervé Regnauld

Abstract:

Coastlines are very sensitive morphodynamic systems. In particular, coastal sedimentary environs quickly respond to long-term changes of external driving factors or boundary conditions. From a Quaternary point of view, these driving factors are relative sea level fluctuations and climate, while in Holocene times anthropogenic influence on the sediment fluxes becomes significant. Regarding the very short time scales, erosion and sedimentation processes during individual events may entirely modify the morphological structure and also the ecosystem of a coastal section within hours and days. Several sections of the coasts of Phang-nga province, Thailand, and Banda Aceh, Sumatra, almost completely recovered their quasi-equilibrium state only three or four years after the Indian Ocean Tsunami of 2004. Other events had long-lasting morphodynamic effects, for instance the Grote Mandränke at the North Sea coast, a severe storm flood in 1362, which created the Dollart and significantly widening the Leybucht, Harlebucht and Jadebusen.

This session will be sponsored by the German working group "Geographies of Seas and Coasts" (Arbeitskreis "Geographie der Meere und Küsten", AMK) which is celebrating its 30th anniversary in 2012. It aims at bringing together latest advances in research on morphodynamic response to any type of extraordinary short-term impacts on coastlines worldwide (storm surges, tsunami, man-made constructions, etc.) covering the entire time range from the mid-Holocene to the present. We encourage researchers to submit papers on either (i) monitoring or modeling re-organisation of coastal systems after disturbance by applying field-based methods and/or remote sensing or on (ii) the identification of episodic events in the palaeo-record and the estimation of their impact on shoreline evolution. Any spatial or temporal scales are welcome.

Session: New power from the global south in processes of globalization

Chairs: Martin Franz & Sebastian Henn

Abstract:

Over time, geographers have contributed with different theories and concepts to the analysis of and better understanding of processes of globalization. However, the debate has mostly been dominated by a one-sided perspective, which primarily has focussed on transnational companies (TNCs) from the global north in terms of their strategies, networks and power as well as their societal and territorial embeddedness. Doing so, it has been largely neglected that globalization processes increasingly have been influenced by actors from the global south:

- The liberalization of many markets usually is not a deregulation, but rather a re-regulation, in which political actors actively define the framework conditions for economic activities of foreign investors. Scale and success of this state control are depending on various factors such as the attractiveness of the specific location and the political system.
- Companies from emerging and developing countries do not only compete in their home markets with TNCs or act as suppliers for them, but are increasingly investing in other markets themselves. When Indian car producers buy British car brands or a Chinese steel company buys mines in Australia, then the familiar perspective on globalization processes is turned upside down.
- Social movements, trade unions and NGOs in the global south self-confidently contest the activities of TNCs and develop power to influence globalization processes. By exercising their power they influence political actors and directly impact companies' strategies.

Given the insufficient reception of those and similar complexities in recent geography, the session aims to critically discuss the reasons behind these developments and contribute to the conceptual understanding of such increased inter-dependencies. With this focus, various contemporary geographic research fields on micro, macro and meso level can be addressed.

Session: Post-development and postcolonial studies: Research on inequalities as a challenge for Geographical Development Studies (GDS)?

Chairs: Martina Neuburger & Tobias Schmitt

Abstract:

The past two decades have seen an increased influence of postcolonial perspectives on Social Sciences and Humanities. At the same time Post-Development statements contributed to the challenge of hitherto existing development analyses and discourses. They currently pose fundamental questions to GDS because of their implicit or explicit focus on the so called 'Global South'. Methodologically and empirically, innovative studies try to cope with this new defiance. Yet, due to different research traditions in the scientific community, geographers deal quite diversely with relevant topics. Nevertheless, we observe parallels as well as contradictions in respective studies.

We consider the IGC an adequate platform for intense international discussions on the future of Development Studies. Therefore we would like to propose a panel with leading experts in GDS, representing diverse theoretical and methodological approaches. The panel's aim would be to identify the current panorama of GDS and the challenges, which result from Postcolonial Studies and the Post-Development approach. The composition of the panel should lead to an intense exchange about the common grounds and the differences of Development Studies, especially between the North and the South. At the same time it would create an excellent opportunity to elaborate new paths for Development Studies as 'Inequality Studies', integrating reflections about entanglements, power-relations, racisms, the production of knowledge, processes of normalization etc. Furthermore, the intention is to introduce the fishbowl-method as a debate format to avoid an insuperable gap between podium and audience and in order to increase participation possibilities.

Our aim is finally to use the opportunity of the international community's encounter at the IGC to bring together these different perspectives in Geography and to contribute to current debates by focussing on the question of reproduction of inequalities and colonial structures.

Session: Potential and limitation of proxy time-series and data products

Chairs: Cyrus Samimi & Ulf Büntgen

Abstract:

Understanding spatiotemporal variations in environmental data describes a fundamental methodological task within the framework of modern natural sciences. In this regard, time-series of parameters and processes and data products such as remote sensing output can contain important information that allow for a better understanding of the Earth system. However, recorded and proxy time-series and data products often comprise different temporal resolution and length, as well as spatial density, and thus provide varying degrees of insight. Uncertainty inherent to such data may further complicate their analysis and interpretation with possible implications for their crosscomparison. In our session, we aim to particularly stress not only the strength of diverse time-series and data products but also to highlight associated constraints with regard to the numbers used and methods applied. Our session will provide an interdisciplinary platform to exchange and debate experiences among those researchers that frequently rely on the quality and quantity of spatiotemporally explicit data resources. We therefore encourage colleagues from a wide field of environmental sciences to participate. Talks from the forefront of time-series and data product analysis are welcome and likely will stimulate future cross-disciplinary endeavours. Our session is expected to provide a broad overview and to simultaneously reveal detailed insight. The focus should be on the methodological development of proxy records and data products, their subsequent analysis and indispensable quality assessments. Examples may contain time-series analysis, extrapolation methods, calibration/verification trials and comparison of data products. Our key interest in the proposed session is mainly related to the increasing need to range on going environmental processes that are measured via instrumental stations, satellite systems and various digital advices, for example, in a longer-term perspective.

Session: Spatial network science and complex systems – Methods, data, and application

Chairs: Stefan Hennemann & Franz Huber

Abstract:

The concept of networks has a long tradition in various scientific disciplines, such as social sciences (social networks), mathematics (graph theory), informatics, etc. Recently, the field experienced an interdisciplinary renaissance when in the context of so-called complex networks new properties were found in many different real-world networks having far reaching implications. However, addressing spatial questions, geographers have a natural interest in networks.

Important contributions from geographers have until today mainly concentrated on connecting content with network-based methods of investigation. Examples include the research on world city networks, research on local clusters and industrial districts, research on global value chains, and on innovation systems.

Accordingly, the purpose of this session is to present applications of the complex network concept to practitioners and researchers, to highlight the insights that can be gained, and thus to bring the scattered network science into the geography mainstream. This includes the discussion of relevant quantities and methods as well as visualization and simulations.

Session: The emergence of China's regional economies in the global economy: a new perspective on upgrading and innovation in global-local networks

Chairs: Daniel Schiller & Javier Revilla Diez

Abstract:

The regional economies of China have realised high growth rates and a remarkable speed of transition for a period of about 30 years and led scholars assessing its development trajectory to postulate the emergence of a new model of regional development in the global economy. It suggests that the ongoing transformation of the economy will in the future be based on the breakthrough of innovation in addition to production and the advent of a knowledge-based society by the year 2020 as envisaged by the long-term planning of the Chinese government. The major building blocks of this new growth model can be summarized as (i) sectoral structural change from traditional to modern industrial branches, (ii) re-focusing of the export growth model towards the domestic market, and (iii) upgrading of technological and organisational capabilities of firms. These industry-level determinants are complemented by regional determinants which are shaped to a large degree by different layers of the state and by the national and respective regional innovation systems. It is the aim of this session to present empirical studies on different regional economies in China which are contributing to the following research topics:

- Development paths of Chinese regional economies between the global economy and a reorientation towards the domestic market
- Interactions among the spheres of industry (foreign and domestic firms), science, and government within regional innovation systems and at the national and global scale
- The influence of institutional settings and the government in China's regional economies on the governance of business relations, learning, and upgrading activities
- Formation, migration, and regional availability of highly-qualified human capital and entrepreneurs
- The emergence of firms from China as indigenous actors in production and knowledge networks at the global stage

Session: The global and the virtual: geographical imaginations of the digital place

Chairs: Henri Desbois & Guy Thuillier

Abstract:

Digital technologies are a key element of the ongoing globalization process. Not only electronic communication networks are instrumental in building the ever increasing interdependency between the different parts of the world, but the digital technologies contribute to transforming the geographical imaginations of the globalized world. Using the internet is a daily routine in most developed countries, and even in some developing regions where the wide availability of wireless services through Smartphones compensates for the scarcity of fixed lines. It's also a very efficient way to experience how the world is shrinking. With YouTube and Twitter, the unrest in the Arab world or the Japanese disaster are instantly events of global reach, much more quickly than any of the pre-internet media would allow. This globalization through the new media is restructuring our geographical imaginations, most notably by blurring the distinction between what is close and what is remote. The virtual earths, the digital mapping software, the Global Positioning System, and many other geographical tools intimately linked to the digital revolution, are deeply reshaping the way we envision the space we live in. The purpose of this session is to explore the geographical imaginations of the new digital world.

These imaginations can be studied both in the popular culture (many works of science fiction about cyberspace are actually comments about the transformation of the networked/virtualized space), and in the discourse of the academy. The popular and the academic imaginations are often overlapping: cyberspace was first a science fiction idea before becoming just another way to name the internet. Below are some examples of suggested topics for this session:

- Geographical imaginations in the GPS era.
- What sense of place in the digital world?
- New mappings of the world
- Geography of the digital development

Session: The land of indigenous traditional knowledge

Chairs: Paula Smith & Mirjam Hirch

Abstract:

Over the course of the last two decades paradigms of thinking are in the process of changing. International policies and conventions, such as the Convention on Biological Diversity (CBD) have increasingly been developed to use and protect Indigenous traditional knowledge. Projects have been established between diverse stakeholders acknowledging the importance of Indigenous traditional knowledge in areas such as e.g. climate and land use practices. This can make valuable contributions for all humanity.

Indigenous communities who rely on traditional knowledge are, in part, place-based for their very survival and cultural existence. A large number of events and sustainable development are acknowledging Indigenous traditional forms of land-use practices, know-how, and linking to western scientific knowledge to build a brighter future for all humanity to live in the current period of rapid changes such as climate change.

The session is dedicated to discuss geographic research undertaken that involves understandings and applied models of Indigenous traditional knowledge for the benefit of communities faced with significant social, ecological, economic, political, strategic and cultural challenges. Focusing on human adaptation strategies to a changing world.

The main keywords upon which we (indigenous and non-indigenous young researchers) would like to draw the discussions are the following: Integration of different epistemologies- science and traditional knowledge- in a mutually beneficial way; best practice models of collaboration and community participation, ethics in research and ethical guidelines; cultural landscapes; socioecological resilience; biocultural interactions.

Session: Towards health promoting water management

Chairs: Thomas Kistemann & Iain Lake

Abstract:

The River Jordan as well as the disappearing Aral Sea are well known examples of the difficulties of managing rivers and groundwater, especially for projects which have non-local effects and are appraised under aspects of globalisation. The management of water is becoming more and more a multi-dimensional issue.

Water is, beyond agricultural and industrial uses, the most essential necessity for human life. Its quantity, quality and accessibility directly affect human health and well-being. Water management is becoming increasingly topical as global populations rise and industrialisation and urbanisation increase the demand for water. These problems will become increasingly complex as climate change alters the geographical distribution of water across the globe. These changes are likely to drive a number of nations and regions beyond the borders of sufficient availability of water resources within the coming decades. Numerous effects are expected as a follow-up of this shortage, which will have influences on the health and well-being of millions of people and increase the potential for international conflicts. Despite urgent need for coordinated governance of water resources, the European UNECE/WHO Protocol on Water and Health is the only legally binding international instrument focusing on water & health issues to date.

This session intends to reflect the current knowledge of issues concerning the management of water to promote health. National planning of limited water resources is most likely to care for national water needs only. In this session we will explore the potential for geography to support more general and supranational views on the resource water and alternative plans for action beyond national boundaries. It is intended to encourage international presentations reporting about global aspects of water management, its effects on human health and well-being arising from global environmental, social and political changes.

Session: Urban climate and air pollution in a changing climate

Chairs: Wilhelm Kuttler & Christoph Schneider

Abstract:

Against the backdrop of a continuing increase in global temperatures and proceeding urbanisation, the session will consider the resulting changes in thermal and air quality conditions in urban areas. The first part of the session (with presenting papers) will analyse the impact of heat waves on air temperature, ozone and particulates as the two most important air pollutants in future and compare current levels with those to be expected. The multi-faceted meteorological and chemical parameters and interactions between them which can lead to ozone and particle production need to be addressed. In altered climates ozone concentrations will not only rise but will rise to differently in space and time depending on the regional contexts (eg. urban versus rural). Furthermore, the effects of biogenic and anthropogenic hydrocarbons (AVOCs, BVOCs) on ozone production will be discussed. The frequencies of ozone concentrations in excess of present and future limits need to be compared. While the statements on expected ozone concentrations are more or less clear, this does not apply to predicted future particulate matter concentrations as these are largely dependent on the relevant chemical precursors. However, these are subject to considerable spatial variation.

The second part of the session will include presentations which discuss measures taken at the urban level to mitigate global climate change. These may lead not only to reduced carbon dioxide emission but also to lower air and radiation temperatures.

Ultimately, the mitigation of the impacts resulting from high air temperatures and enhanced levels of air pollutants within urban areas on human beings form the key concern of the session.

Session: Vector-borne diseases and climate warming

Chairs: Carl Beierkuhnlein & Markus Neteler

Abstract:

In recent years vectors (e.g. insects) with high capacity for transmitting infectious diseases between humans have been found to establish and spread in various continents outside of their native range.

The number of vector-borne diseases that were performing outbreaks has increased remarkably during the last decades. Climate change is expected to promote this development.

However, it is certainly both, climate change and globalization (especially intercontinental travelling and trading) that contribute to modified spatial patterns of occurrences and transmission cycles of vector-borne diseases, resulting in a growing threat for humans.

Efficient monitoring and modelling approaches are needed in order to identify regions at potential future risk and to develop societal coping strategies. The recent spread of vector-borne diseases is particularly also a result of gaps in knowledge and methodological shortcomings in detecting vulnerable regions and populations at an early stage of exposure.

Cooperation between medicine, entomology, virology, and geography is urgently needed, but less developed, yet. Expertise derived from human and physical geography has to be joined. This session is aiming to promote the discussion, to discuss case studies, support the development of networks and to create public awareness for this upcoming and highly relevant issue.