

A collection of ERC projects in Social Sciences and Humanities

### Vilnius, September 2013





**European Research Council** Established by the European Commission

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### Introduction

Encompassing a wide variety of topics, the Social Sciences and Humanities (SSH) disciplines help deciphering many aspects of human life.

They produce knowledge about our societies and our past, our complex relations to each other and to our environment. They are crucial to build, understand and improve our institutions, which are the backbone of any democracy. They enrich the understanding of how modern economies work – or fail to work and they critically reflect on the consequences of industrialisation, urbanisation and population growth. They provide the intellectual power to respond to some of the most pressing challenges facing our globalised world.

The creation of the European Research Council (ERC) in 2007 has represented an unprecedented change for the SSH in Europe. The ERC which funds frontier-research in all fields - including Physical Sciences and Engineering and Life Sciences - has supported over 600 projects in the SSH field with a total budget of around €1 billion so far under the current EU research programme. Under the new EU research programme Horizon 2020, over €2 billion are foreseen for excellent SSH projects.

ERC-funded projects in the SSH are often led by multidisciplinary teams with strong links to other domains; they can range from archaeology, urban studies and linguistics to demography, the performing arts and law or economics.

This collection of projects offers a taste of the breadth and depth of some research funded by the ERC in this field.

## Don't miss the ERC Session "Social Sciences and Humanities domain: widening participation"

#### 24 September 2013- 14:00 - 15:30

Location: Mykolas Romeris University - Room I-417, 4th floor

With the participation of:

ERC Scientific Council members Nicholas Canny, National University of Ireland and Núria Sebastián Gallés, University Pompeu Fabra, Spain

ERC grantees Natalia Letki, University of Warsaw, Poland; Kenneth Hugdahl, University of Bergen, Norway; and Vladimir Canudas Romo, Associate Professor, University of Copenhagen, Denmark

The participants will get some insights into the general situation of Social Sciences and Humanities in ERC calls. Based on the individual experiences of ERC grantees as well as on statistical evidence provided by the ERC Scientific Council members, the session will encourage a lively exchange of views on the possible solutions to widen the participation of researchers from all over Europe in ERC competitions.

Session moderated by ERC Scientific Council member Alain Peyraube, Centre de Recherches Linguistiques sur l'Asie Orientale, France.



### In search of how your brain feels

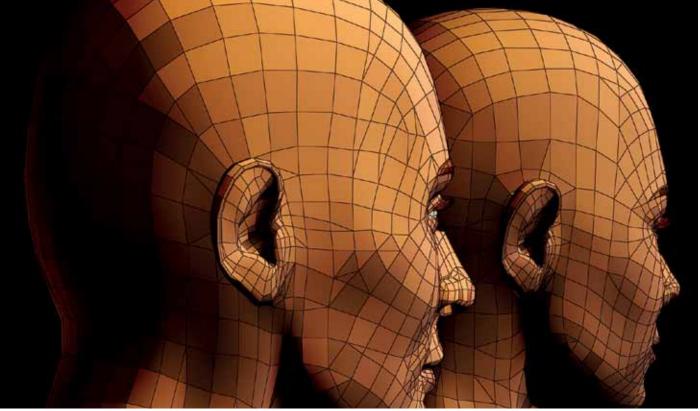
Watching a James Bond movie is a captivating experience. Viewers have the capacity to slip into the skin of their heroes to vicariously experience their actions and share their emotions. ERC grantee Christian Keysers leads a project aimed at understanding the processes of empathy within people's neurons.

With his research team, Prof. Keysers examines how the network of regions programing our own actions helps us to perceive the actions of others (the so-called "vicarious motor network"). Part of the research tackles how people share others' actions. It focuses on the direction of information flow between the different vicarious motor nodes and challenges traditional models of action observation.

Another aspect of the project explores emotions. Prof. Keysers examines how neurons in brain regions associated with empathy respond during the experience and the witnessing of emotions.

This project opens exciting horizons in various areas, notably life sciences; for instance, it could contribute to progress in genetics but also to better therapies for psychiatric disorders such as autism, schizophrenia and psychopathy.

In other fields such as robotics, the results could concretise a biological example of how brains can process, predict the actions of others and read their feelings. In the long-run, interactions with robotics will feedback into neuroscience, thus allowing researchers to test whether these models are correct.



Principal Investigator: Christian Keysers
Host institution: Royal Netherlands Academy of Arts and Sciences (The Netherlands)
Project: Cracking the code and flow of empathy (VICARIOUSBRAIN)
ERC call: Starting grant 2012
ERC funding: €1.8 million for five years

### Risks and challenges of energy investments in the Sahara desert

The need for Europe to get a large part of its energy from renewables after 2020 is no longer questioned. In a carbon-neutral future, solar panels and wind turbines in the Middle East and North Africa (MENA) region could power the growing population in this part of the world while also providing clean electricity to Europe.

ERC grantee Anthony Patt seeks to address the risks that may emerge from trans-Mediterranean cooperation in the sector of renewables. A multidisciplinary research team will investigate the economic and social implications of such investment in the MENA region, as well as the environmental constraints and potential conflicts.

According to Prof. Patt, European countries have engaged in switching from coal-fired plants to non-carbon based energy sources but Europe may not have enough land to respond to growing electric power consumption needs. It is also a densely populated continent without particularly strong wind or sunlight. While the Sahara desert has large areas of land, ample sunlight and strong wind that could be converted to electricity.

Prof. Patt will examine the security, development and environmental risks that may arise from Europe's close energy dependence on the MENA region. Other aspects such as government corruption will be tackled by the project.

By using computer models, as well as interviews and workshops, the team hopes to offer solutions to alleviate these risks. Their results could also help shaping Europe's future energy policies.



Principal Investigator: Anthony Patt Host institution: Swiss Federal Institute of Technology, Zurich (Switzerland) Project: Social challenges of trans-Mediterranean renewable power cooperation (DESERTECTION) ERC call: Starting grant 2012 ERC funding: €1.5 million for five years

### Is family break-up turning a corner?

Whereas many have looked at negative social trends and predicted that changes in women's roles mean the demise of the stable family, ERC grantee Prof. Gøsta Esping-Andersen sees reason for optimism.

Most of us are familiar with news stories reporting declining fertility, or rising divorce rates and increases in the number of single parents. According to Prof. Esping-Andersen, much research in demography considers these trends as the product of increased individual choice and self-realisation. He argues that rises in divorce and declining fertility are symptoms of a transition from traditional family models to new ones that are increasingly premised on egalitarian and symmetric gender roles.

Prof. Esping-Andersen believes the clues are in the figures: whereas divorce and low fertility used to be more prevalent among highly educated women, these groups now see more stable couples and larger families. Meanwhile, in Denmark for example, less educated women seem to have fewer children, experience higher rates of divorce and raise families as unmarried single parents.

He explains this with a new model: a "diffusion process" within society whereby slow, gradual changes suddenly accelerate when a "critical mass" is achieved. Danish men's input to domestic work hardly changed between the 1960s and 1980s, but they started sharing it almost equally from the 1990s.

The higher educated were at the vanguard of such changes as they were the first to embrace a gender-equal model for the family. Nowadays, it is university-educated women who are having larger families.



Principal Investigator: Gøsta Esping-Andersen
Host institution: University Pompeu Fabra, Barcelona (Spain)
Project: Stratified family dynamics: polarising trends in couple behaviour and parenting (Family Polarization)
ERC call: Advanced grant 2010
ERC funding: €2 million for five years

### Explaining the unexpected: how communism fell in Eastern Europe

The fascination of historians to understand the tides of history that led to democracy in Eastern Europe is still vibrant. In his research, ERC grantee Ivaylo Znepolski elucidates the significance of the fall of former Soviet bloc regimes from 1956 to 1989.

By analysing the motives and behaviour of individuals and groups, Prof. Ivaylo Znepolski wants to identify the key factors behind the social and political changes that took place in Eastern Europe until the fall of the Berlin Wall. He is trying to get an insight into the period that followed the "destalinisation", when classical Stalinist models were no longer at stake.

Until now, the scientific literature had focused on traditional political theories of totalitarianism. According to Prof. Znepolski, this is a too crude vision of these societies which cannot capture late communism in all its singularities. He believes that the role that individual actors, such as artists and professional associations, have played in the transformation of ex-communist societies is at the core of these democratic changes.

In particular, he considers that the concept of "incidents", which describes events that cannot be predicted and that were often sanctioned by the authorities (e.g. a forbidden publication, an unauthorised demonstration), is promising to explain how communist regimes really functioned during this period of time.

Through his research, Prof. Znepolski also holds out the hope to offer young generations a renewed appreciation of the history of Eastern Europe.



Principal Investigator: Ivaylo Znepolski
Host institution: Sofia University Sveti Kliment Ohridski (Bulgaria)
Project: Regime and Society in Eastern Europe (1956 - 1989). From Extended Reproduction to Social and Political Change (RESOCEA)
ERC call: Advanced grant 2010
ERC funding: €1 million for five years

### **Understanding consumers' eating habits**

Diet-related diseases have become a major public health concern. Consumers' information and responsiveness are therefore crucial when they purchase goods. ERC grantee Prof. Rachel Griffith investigates consumer food purchasing behaviour, firm food pricing behaviour and their impact on nutrition.

Prof. Griffith aims at understanding what are the key factors determining consumers' choices and what role firms play in forming their decision. She is particularly interested in the impact of tax policies, regulation and information campaigns on consumers' behaviour.

She showed that there has been a lot of emphasis on prices; prices are pretty much the biggest factor in making purchasing decisions, but many other important factors intervene such as how much time and effort consumers put in understanding the nutritional properties of a product, how easily accessible that information is and the propensity to self-control.

Prof. Griffith also analyses the role that taxation would play in changing consumers' behaviour. She has looked at the impact that a minimum price on alcohol would have on households' consumption and concluded that a reform of the current excise tax on alcohol would be more efficient than other current policy tools. An example of her work is the evaluation of the impact of the "five-a-day" campaign, which recommends eating five portions of fruits and vegetables a day.

The research team expects a number of interesting findings from the project, including a better understanding on the way that information helps consumers to make decisions, and more appropriate and effective regulation of the food industry.



Principal Investigator: Rachel Griffith
Host institution: Institute of Fiscal Studies, London (UK)
Project: Microeconomic Analysis of Prices, Food and Nutrition (MAPFAN)
ERC call: Advanced grant 2009
ERC funding: €1.6 million for five years

### Understanding the roots of conflicts

During the last two decades, many developing countries have experienced violent conflicts with enormous economic and human costs. In the mid-1990s, one in three African countries was involved in a civil war. ERC grantee Prof. Eliana La Ferrara is studying the economics of conflict in these countries.

Using tools from economics, political science and sociology, Prof. La Ferrara aims to identify the causes of conflicts and to assess their consequences. This domain of research includes analysing not only violent conflicts, but also social clashes, cultural divisions or conflicts over the control of natural resources.

One aspect of her research focuses on the behaviour of multinationals and foreign investors. Although political instability is harmful for private investment, she believes that some businesses, not only the defence industry, may benefit from war. In her project, she has tried to establish the link between conflicts and companies' stock market valuation and to detect the occurrence of arms embargo violations.

At a smaller scale, her team showed that the incidence of conflicts in Sub-Saharan Africa increases in areas particularly affected by climate changes such as severe drought. The team also revealed significant persistence of conflicts over time and large conflict spill-overs across neighbouring areas.

Her research results are promising. One example is the new index she could develop to measure the role of diversity as a potential source of conflict. This index which takes into account the ethno-linguistic origin, educational background, employment status and several other characteristics of individuals belonging to a specific population, could also be used in industrialised countries.



Principal Investigator: Eliana La Ferrara
Host institution: Bocconi University, Milan (Italy)
Project: Conflict, Identity and Markets (CIDAM)
ERC call: Starting grant 2007
ERC funding: €430 000 for five years

# An historical dimension of herding practices in Europe

Domestic species such as sheep, goats, cattle and pigs are known to have entered Europe from the 7th millennium BC. Their spread has led to some modifications of the animals' dietary and reproductive behaviours. ERC grantee Marie Balasse investigates the environmental and physiological constraints on stock-keeping and their adaptation in Neolithic Eastern, Central and Western Europe.

Today's husbandry results from thousand-year-old experiences. The present selection of domestic animals, the adaptation of their diet, the off-seasoning of animal breeding cycles and birth periods are pretty similar to the preoccupations of the very first prehistoric herders.

Marie Balasse aims at analysing the management of animal diet in Neolithic continental Europe. She also assesses the onset and the length of the birth-period for bovines, ovines, caprines and pigs in various environments throughout Europe, with the view to further the understanding of adaptation in farming across Europe.

The project, which involves disciplines as diverse as geochemistry and zooarchaeology, uses stable isotope analysis on bone remains, skeletons and teethes to investigate animal diet history. The results should offer considerable insights into the landscape use, the seasonal foddering, the seasonality of birth and the duration of lactation of Neolithic domestic species.

The research field includes archaeological sites and assemblages in Armenia, Romania, Czech Republic, Ukraine and France.



Principal Investigator: Marie Balasse
Host institution: Muséum National d'Histoire Naturelle, Paris (France)
Project: Stable isotope investigations on the adaptations of Neolithic husbandry to the diverse climatic and environmental settings of Eastern, Central and Western Europe (SIANHE)
ERC call: Starting grant 2007
ERC funding: €883 000 for five years

# Migration and crime control practices across Europe

In the last decades, the impact of migration on the penal policies of EU Member States has been highly debated. ERC grantee Katja Franko Aas investigates these new hybrid and intertwined forms of migration and crime control policies in Europe.

Until now, the existing literature in criminology has mainly focused on the impact of migration on crime statistics, sex trafficking, human smuggling and urban marginality. In her project, Prof. Aas reverses the current trend and proposes to analyse the consequences of migration not only on crime patterns but also on the daily practices of criminal justice institutions.

She believes that the concept of "crimmigration control" reflects the overlap between migration and criminalisation. Current statistics underlie this idea with foreign citizens representing about 20% of the prison population in Western Europe, and reaching peaks in countries like Luxembourg, Switzerland and Belgium. An expanding number of foreigners are also detained in detention centres for asylum seekers or 'waiting areas'.

One of the most pioneering features of her project resides in its comparative and interdisciplinary design. For instance, Prof. Aas examines the nature of traditional prison life and compares it to closed detention centres for asylum seekers. The project aims to examine how 'traditional' criminal justice institutions such as prisons, the courts and the police are being reshaped by immigration and by the growing importance of borders and citizenship.

The research team holds out the hope to broaden the scope of criminological research and to revisit penal sanctions across Europe.



Principal Investigator: Katja Franko Aas
Host institution: University of Oslo (Norway)
Project: 'Crimmigration': Crime Control in the Borderlands of Europe (CRIMMIGRATION)
ERC call: Starting grant 2010
ERC funding: €1.3 million for five years

## People with disabilities, pioneers of architectural innovation

Disability is often associated with access legislation rather than a source of creativity for architects. ERC grantee Prof. Heylighen wants to reverse this perspective: disability can be seen as a valuable source of design and a great opportunity for dialogue.

Through their bodily interaction with the environment, disabled people are able to appreciate spatial qualities or detect misfits in the environment that most architects and designers are not even aware of. The experience and insights of people who are visually impaired or who are diagnosed with autism or Alzheimer disease can complement and enrich the professional expertise in this field.

In her project, she explores a new multisensory design approach in architecture, with the view to improve the quality of buildings and develop innovative design concepts.

Prof. Heylighen is also the holder of an additional ERC Proof-of-Concept grant. She now envisages to enable disabled people to "rent out" their spatial experience to inform architects' design process. This service – in line with the concept of social innovation – will help architects design environments which are respectful of the diversity in people's abilities and conditions. As the population ages, the number of Europeans with some disabilities is expected to increase in the following years. It is therefore important for them as well as for the owners of buildings to create more inclusive museums, shops, restaurants, etc.

Combining architecture and organisation studies, her project will also empower people with disabilities by strengthening their position in the labour market.



Principal Investigator: Ann Heylighen
Host institution: University of Leuven (Belgium)
Projects: Architectural design In Dialogue with disAbility (AIDA); Rent-a-Spatialist
ERC calls: Starting grant 2007, Proof-of-Concept grant 2012
ERC funding: €1.2 million for five years + €150 000

### Textile economy before stores open

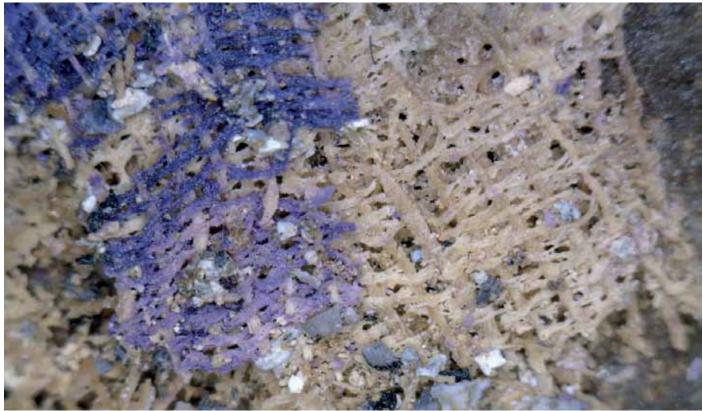
A textile is not simply a system of spun, twisted or spliced fibres. It also results from complex interactions between resources, technology and society. ERC grantee Margarita Gleba studies textile production and consumption and investigates its role in the urbanisation and state formation of the Mediterranean Europe (Greece, Italy and Spain) from 1000 to 500 BC.

Archaeological textile research has demonstrated that intensive production and consumption of textiles has been at the heart of urbanisation throughout history. Textiles were used to cloth soldiers and to show one's social status. Yet, despite the promising early evidence for the influence of textiles in the Bronze Age eastern Mediterranean, there is still very little literature about the role of textile in the formation of Mediterranean urban centres during the Iron Age.

Dr Margarita Gleba's research focuses on the significance of textiles for the development of city-states (as clothing, elite regalia, trade and exchange items) but also on its implications on farm land, animal husbandry, labour resources and urban lifestyle.

She conceives the economy of textile production as a network that stimulated the mobility of goods, people, ideas and technologies. One original aspect of her work is to show that the production implied a change of intensity and scale of organisation and that it shifted from making subsistence products to the manufacture of non-essential or luxury goods.

By teaming up archaeologists with chemists, biologists and textile scholars, Dr Gleba expects to reveal some of the multifaceted aspects of textile production and consumption in the early urbanised Europe.



Principal Investigator: Margarita Gleba
Host institution: University College London (UK)
Project: PROduction and CONsumption: Textile Economy and Urbanisation in Mediterranean Europe 1000-500 BC (PROCON)
ERC call: Starting grant 2012
ERC funding: €1.5 million for five years

### Argentina's haunted collective memory

The Mothers of the Plaza de Mayo have been rallying weekly since the mid-1970s to seek justice for their missing ones in Buenos Aires. ERC grantee Kirsten Mahlke investigates the connections between the fantastic narrative and the historical terror that took place during the military dictatorship in Argentina (1976-1983).

The remnants of the Argentinean violent past have persisted into present times of democracy; the uncertain status of the Disappeared ("los Desaparecidos") still evokes a painful collective memory. Around 30,000 militants, suspected of terrorist activities against the state, were kidnapped, tortured, murdered and made to disappear during the dictatorship. This historical case created an unspeakable trauma in the Argentinean society and forms the basis of this ERC project.

Prof. Mahlke combines literary studies with political science and social anthropology to examine the different ways in which the Disappeared shaped the Argentinean society. For the first time, the Disappeared are analysed as figures of the transition between the reality and the fiction.

By using tools such as interviews, novels, artistic and social performances, films and documentaries, she questions the limits between the historical reality and the fantastical imagination that are closely linked to the tragic episode. Prof. Mahlke is confident that her results would bring new insights to understand and re-evaluate the current war against terrorism led by Western democracies.



Principal Investigator: Kirsten Mahlke
Host institution: University of Konstanz (Germany)
Project: Narratives of Terror and Disappearance. Fantastic Dimensions of Argentina's Collective Memory since the Military Dictatorship (NOT)
ERC call: Starting grant 2009
ERC funding: €1.2 million for five years

### Children's take on learning

How babies learn from adults? What's the role of communication in this process? ERC grantee Prof. Gergely Csibra has demonstrated that infants expect words to match with objects even before they start to speak. Research also suggests that babies' brains are prepared to learn from communication, but the underlying processes are not yet known.

Prof. Csibra's research focuses on the cognitive and neural resources that children can deploy in order to learn from others by communication. With his research team, he aims to explore whether and how human infants are prepared to learn from adults through communication, what cognitive and neural systems support such learning process, and how this social learning process changes infants' perception, interpretation and representation of the world. In other words, the idea is to test how communication - through language as well as signals such as gaze direction or pointing - impact babies' brain development.

Beyond traditional behavioural methods, the team will use eye-tracking and neuroimaging techniques to unveil the processes of perception, attention and memory during non-verbal communication.

As a leading expert in cognitive science, Prof. Csibra's ultimate point is to demonstrate that communication to babies in early months of life not only strengthens the affective bond between parents and children but also regulates infants' emotional states. Early interactions allow them to actually learn from others and from the physical world surrounding them.



Principal Investigator: Gergely Csibra Host institution: Central European University, Budapest (Hungary) Project: Human infants' preparedness for relevance-guided learning through ostensivereferential communication (OSTREFCOM) ERC call: Advanced grant 2009 ERC funding: €1.5 million for five years

## Predicting people's response to water disasters

Human societies are haunted by a sense of vulnerability in the face of major environmental disasters and global climate change. These natural hazards are usually associated with a loss of natural resources, a fear of nature that is increasingly unpredictable and social disruptions as natural habitats are destroyed.

While water is the most vital natural resource, unexpected changes in water levels and water supplies can also be devastating. ERC grantee Prof. Kirsten Hastrup endeavours to examine people's apprehension of disastrous environmental changes. She aims to offer a new approach of the notions of risk and disaster and explore their close relation.

She studies three kinds of water-provoked crises: the melting ice in the Arctic and other glacier areas such as the Peruvian Highlands, the rising seas in the Pacific and along the Indian coast, as well as the drying lands and desertification mainly in West Africa.

Prof. Hastrup's research promises to reveal a new understanding of the ability of societies to deal with water borne environmental crises. In other words, she wishes to provide clues on how people respond to related uncertainties and ensure the survival of their communities. She believes that technologies are useful in that field but the human and social potential is vital for humans to adapt to new environmental realities.

At the crossroads between environmental sciences, geography and anthropology, this interdisciplinary project will show how nature and society are deeply interconnected. There are also hopes that the results might bring some useful insights to the pressing challenge of global warming.



Principal Investigator: Kirsten Hastrup
Host institution: University of Copenhagen (Denmark)
Project: Natural environmental disasters and social resilience in anthropological perspective (Waterworlds)
ERC call: Advanced grant 2008
ERC funding: €2.98 million for five years

"Research funding agencies, such as the European Research Council (ERC), have recognised that the Social Sciences and Humanities are a vital research area. They provide the intellectual power to respond to some of the most pressing challenges facing our globalised world."

> Prof Helga Nowotny ERC President and Chair of its Scientific Council



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