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The **Arctic & Antarctic International Journal of Circumpolar Socio-Cultural Issues*** (A&A-IJCSCI), is an international, peer-reviewed, scholarly journal published annually on behalf of the Foundation of High Studies on Antarctica and Extreme Environments (FAE, Argentina), Universidad del Salvador (Faculty of Social Sciences, Argentina), The University of Iceland (Faculty of Social Sciences) under the auspices of the International Association of Circumpolar Socio-Cultural Issues (IACSI) University of Iceland (Department of Sociology), the University of Jyväskylä (Department of Social Sciences and Philosophy, Finland), the University of Oulu (Thule Institute, Finland), , and the University of Québec at Montréal (International Laboratory for the Comparative Interdisciplinary Study of Representations of the North, "*Imaginaire du Nord*", Canada).

The **A&A-IJCSCI** has been created by scholars from Social Sciences, Anthropology and Humanities, and also from individuals with different backgrounds but interested in these perspectives and themes, to provide a forum for the study and discussion of the different and interdependent socio-cultural aspects of both circumpolar regions, promoting an international and interdisciplinary dialogue concerning the subjects thereof. In this sense, we privilege articles in the Journal with reference to:

- Local Communities and Extreme Environments
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- Prehistory and History
- Literature and Arts
- Geopolitics and International Relations
- Arctic and Antarctic Comparative Studies
- Other issues related to socio-cultural themes concerning circumpolar areas.

Thinking of the importance of a holistic understanding of the circumpolar phenomenon, we have also considered the need to study the "circumpolar theme" in its bi-polar dimension: the Arctic and the Antarctica, in order to look for convergences and divergences under the debates Local/Global, and North/South, and also looking for the production and transference of knowledge.

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Dwelling and Working in Extreme Southern Circumpolarity: The Antarctica as Locality and Reflexivity

Enrique del Acebo Ibáñez

*Universidad del Salvador / National Argentine Council for Scientific Research
(CONICET, Argentina)*

Abstract

The territory of the Antarctica and the human presence there represent a *total and complex phenomenon*, that is: multidimensional and interconnected. The different ways of dwelling and working in the Antarctica imply a dynamic process of continuous production of new geo-cultural images, texts and discourses. To live and work in the Antarctica suppose a life strategy, conditioned by the *extreme cold*, the *isolation* and the *inaccessibility*, where all people involved feel (perhaps unconsciously) part of that total phenomenon.

A creative strategy to dwell and work in the Antarctica implies to develop and build a new trajectory of extreme southern identity in terms of territory, geographic and cultural features, together with the globalization process and the global environmental concerns: cultural landscapes are also present in the White Continent.

So that to dwell and to work in the Antarctica deal with adaptation, social practices in everyday life, and representations of reality, where the extreme cold is a restriction but also an opportunity and challenge to conciliate tradition, innovation, as well as creativity.

The emergent concept of *Antarctic social identity* is closely related to other concepts like “mission”, “heroism”, “founding spirit” (*homo conditor*), “adventure” or “risk”, always present along the time in the ways of inhabiting the White Continent and other extreme environments.

It means that a sort of *emotional geography* is present, like a *founding representational myth*, linked to the “historic missions”. Consequently, the Antarctica works as a metaphor of purity, wilderness and virginity, being still nowadays the *Terra Incognita Australis*, a sort of metaphysic sanctuary, a pristine confine of the planet.

Key words

Antarctica, Southern circumpolarity, dwelling, locality, Isolated and Confine Environments (ICEs), coping strategies, psychological impacts, reflexivity, Antarctic social identity

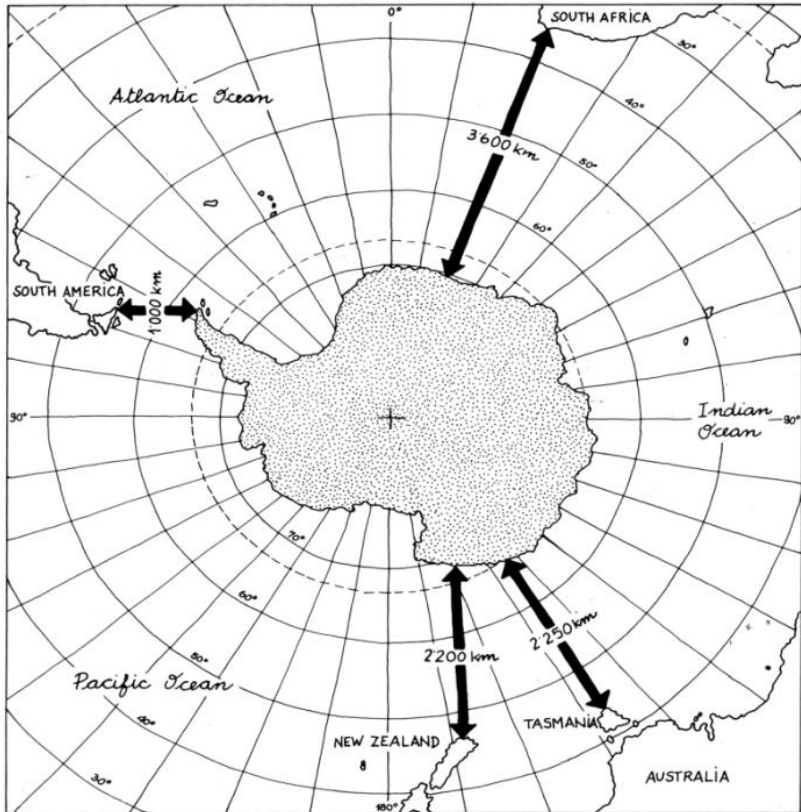
1. Introduction

The area of Antarctica is approximately 5.4 million square miles (14 million square kilometers). Called as “white continent”, “white desert”, “*terra incognita*”, “last boundary on earth”, “last untouched land on earth”, there is also an *imaginary Antarctica* as a fruit of an aesthetic, poetic and utopian approach (cf del Acebo Ibáñez & Costa, 2010). In any case, all ways to refer to it reflects its geographical uniqueness.

In relation to its population, there are not indigenous communities, but both permanent and summer-only staffed research stations. In strict sense there is no resident population because the staff is periodically replaced, also in the so called “permanent” stations or bases. During winter the average population is between 900-1,000 inhabitants, while in summer the average is approx. 3,000-4,000 inhabitants. The largest station is McMurdo (USA) which during summer has a population of approx. 1,000, while other large stations only have between 40-80 inhabitants during that season (i.e. Marambio –Argentina, and Casey –Australia-).

The Antarctica is a unique ecosystem with lots of implications in terms of natural environment, international relations and socio-cultural issues, being the less altered continent by the human activity, perhaps because of its strict “restrictions”: *geographic isolation* and *physical inaccessibility*. A continent of extremes, Antarctica is the highest, coldest and windiest of the Earth.

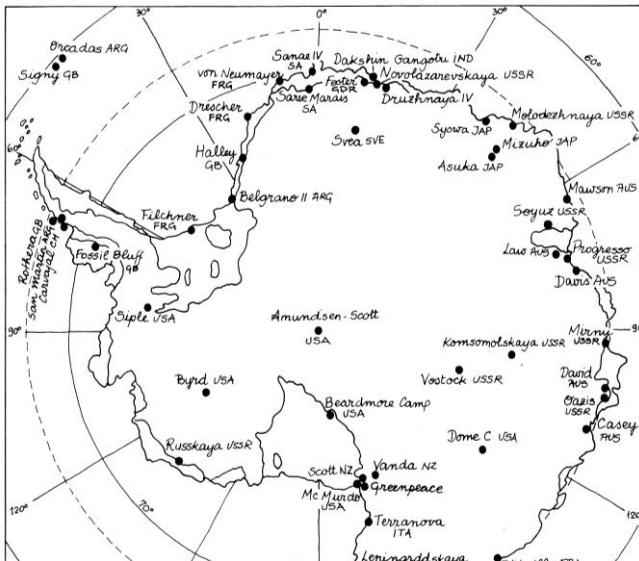
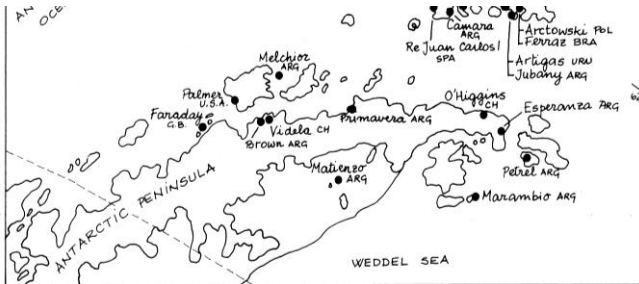
Map 1: Distances between Antarctica and nearest continents



Source: Galimberti (1991)

The population is integrated by mainly scientists and researchers, but also military personnel of different countries linked with sovereignty claims. Consequently, the inhabited settlements can be classified as: i) *permanent* settlements; ii) *summer* settlements; iii) *temporary* settlements, and iv) *inactive* settlements. Each station is an independent small community, satellite communicated with the out world, where important scientific and monitoring programs are operated.

Mapa 2: *Antarctic stations*



Source: Galimberti (1991)

The Antarctic population is mainly adult men aged between 25- 40 years old; women, increasingly incorporated, represent approx. the 20% of the total Antarctic population. In some bases there are family groups with children, with a small school and church like in “*Esperanza*” station (Argentina) and the Chilean “*Villa de las Estrellas*”, a small polar community at Marsh station. They are potentially very small local communities, but they are not permanent, staying just for one or two years once they are selected.

The territory of the Antarctica and the human presence there represent a *total and complex phenomenon*, that is: multidimensional and interconnected. The different ways of dwelling and working in the Antarctica imply a dynamic process of continuous production of new geo-cultural images, texts and discourses. To live and work in the Antarctica suppose a life strategy, conditioned by the *extreme cold*, the *isolation* and the *inaccessibility*, where all people involved feel (perhaps unconsciously) part of that total phenomenon.

A creative strategy to dwell and work in the Antarctica implies to develop and build a new trajectory of extreme southern identity in terms of territory, geographic and cultural features, together with the globalization process and the global environmental concerns: cultural landscapes are also present in the White Continent.

So that to dwell and to work in the Antarctica deal with adaptation, social practices in everyday life, and representations of reality, where the extreme cold is a restriction but also an opportunity and challenge to conciliate tradition, innovation, as well as creativity.

The case of this continent with very low population density living under extreme environmental conditions implies the lack of human comfort, a very difficult access and -closely related to this- its remoteness. That is why we need to go beyond the original concept of environment, which has centered predominantly on its physical and natural specification as “ecological system”, and then favor the emphasis of the anthropological and socio-cultural -and also philosophical- components, which are inextricably integrated into any traditional concept of environment (cf del Acebo Ibáñez & Costa, 2010: 257).

If the conception of the environment is reduced as a mere “ecological system” (*environmentalism*), the answer to the question of what is “*the Extreme*” changes (cf del Acebo Ibáñez, 2018, unpublished).

2. Theoretical fundamentals

There are different and many ways to approach to this total phenomenon, and we have applied some of them in different researches and studies we have run, namely:

- *Rootedness theory* (del Acebo Ibáñez, Giddens) -considers the rooted dwelling as a multi-dimensional and total phenomenon (M. Mauss), that is

the attachment of man to the territory tends to emerge as a complete spatial-socio-cultural and historic phenomenon (cf del Acebo Ibáñez, 2014).

- *Human Ecology* (Chombart de Lauwe, Hawley) -the *community* as a collective answer to the habitat, an adaptation of the human to the living *milieu*.
- *Neo-Ecological School* (D. Erpicun) -self-critique of the Human Ecology, introducing the *individual consciousness*, so the environment is seen as *interiorized milieu*, a territory with shared meanings.
- *Environmental Sociology* (Alvira Martín; Boff; Brailovsky & Foguelman; Catton Jr; del Acebo Ibáñez, Di Pace, Dunlap, Faucheux & Noël, Järvelä, & Wilenius, Leff, Redclift & Benton, Redclift & Woodgate).
- *Environmental Psychology* (Aragonés & Amérigo, Baum & Burnes, Bruun & Schnack, Canter, Davidson & Freudenburg, De Young, Dynes, Fisher & Nasar, Lévy-Leboyer, López Alonso, Proshansky, Proshansky & Fabian, Rosenthal et al., Sommer, Schultz et al.
- *Formal Sociology* (G. Simmel) -the relation between the characteristics of space/territory that impact in the social relations (E. del Acebo Ibáñez, A. Paasi, T. Watsuji, Bell et al., Droseltis & Vignoles), and viceversa (Colin M. Harris, I.B. Campbell et al.).
- *Proxemics* (Hall, 1973; Lécuycer; Palinkas, P. Suedfeld & Steel -1995a) - how near or far in term of space are the actors.
- *Existentialist Sociology* – re-reading of the Existentialist Philosophy (M. Heidegger, S. Weil, O.F. Bollnow, E. Tiryakian, E. del Acebo Ibáñez), and the fact of the human being as dweller and founder of the territory where he lives.
- *Sociology of everyday life and dwelling* in Southern and Northern circumpolar regions (del Acebo Ibáñez; Bjarnasson & Gunnlaugsson; Gunnlaugsson; Pyykkönen; Pyykkönen & Luomala) –national, historic, and socio-cultural phenomena that occur in a given territory as a *total semantic field* (Lefèbvre), -everyday life that implies a “social text” with many readings and possibilities (M. Castells, G. Lukács, H. Lefèbvre, P.H. Chombart de Lauwe, Jean Remy, L. Voyé; Ágnes Héller/School of Budapest, based in Lukács and husserlian category of *Lebenswelt*).
- *Sociology of the body and emotions* (L. Blackman, L. & M. Featherstone, A. Carrillo Canán, R. de Sousa, C.E. Osgood et al., A. Scribano; E. del Acebo

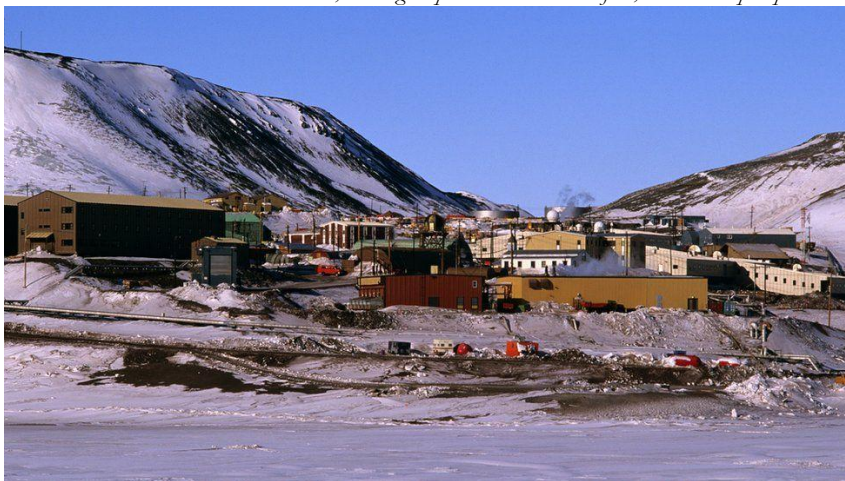
Ibáñez) –how the extreme environment/climate impact in the subject’s body and emotions.

- *Psycho-sociology of mental representations* (López Alonso, Moscovici) of *space and time* in the Antarctica (L.A. Palinkas et al., J.S. Mocellin, P. Suedfeld, J.P. Bernadelz & M-E. Barbarito), and the existential time address to the biographical, historic and institutional times.

Departing from these theoretical frameworks many studies have highlighted phenomena and questions involved with the fact of inhabiting the extreme Southern circumpolar environments and their *inherent meaningful connectiveness* between territory, environment, climate and the human being (M.A. Cravalho, 1996; E. Leane. 1961; A. Elzinga, 2009; K. Weiss et al., 2007; C.M. Harris, 1991; I.B. Campbell et al., 1994; X. Winston Yan & E. England, 2001), as well as *attitudes and everyday behaviors*, with the consequent *inter-subjective relations* (L.L. Schmidt et al., 2005; Martin P. Paulus, 2009; Ron Roberts, 2011; Joanna Word, 1999; Greg Décamps & Elizabeth Rosnet, 2005; A. Peri, C. Scarlata & M. Barbarito, 2000; Wood, J. et al., 1999; Taylor, 1986; E. Gunderson, 1963).

Image 1: McMurdo station (US)

The McMurdo station has a harbour, landing strips on sea ice and shelf ice, and a helicopter pad.



SOURCE: GETTY IMAGES ©

Image 2: McMurdo coffee house (US)



Source: PETER REJECK, NSF

Image 3: Interiors of the Halley VI station (UK)



Source: JAMES MORRIS-Image ©

3. Coping Strategies

When referring to *coping strategy* (cf Bærenholdt and Aarsæther 1998a: 27-36), different authors try to capture local strategies that result from the processes of reflexivity. These *coping strategies* present –as different researchers agree, three dimensions, namely: i) *innovation*: to find new solutions and means to solve local problems; ii) *networking*: to increase interpersonal relations beyond every established functional activities (social, economic, technological) that are transcending the established limits of institutionalized social fields; and iii) *formation of identity*: confirming a sense of belonging built precisely as a consequence of facing the specific multidimensional features present in the Antarctic stations life: a way to inhabit, *to-be-in-the world* overcoming the strong environmental and climate conditions and creating senses of belonging and new representations of the extreme.

Psychological impacts

It is very well known that one of the main individual concerns is the *long duration* of the missions in *isolated and confine environments* (ICEs). In fact, this may cause important negative impacts in human performances, the individual health and well-being as well in the success of the mission of a whole (cf. L.A. Palinkas, J. Johnsson & J. Bosler, 1998).

These problems emerge according to: i) *the individual background* (physical, psychological, socio-cultural); ii) *the individual goals and values*, y iii) *the interaction network* in the given Antarctic station.

The main problems observed after many field studies run in the Antarctic stations by psychologists, sociologists and anthropologists in different isolated and confine environments (ICEs) in the Antarctic stations are: mild cognitive impairment, time-sense disturbances, sleep deprivation, psychosomatic problems, anger, depression, fatigue, conflict in the social relationships, among others.

Research developed with populations of both men and women that had dwelled and worked in Antarctic stations spending the whole winter (cf. L.A.Palinkas & Houseal, 2000; L.A. Palinkas, J. Johnsson & J. Bosler, 1998; etc.), showed that adaptation and performance are directly associated with: a) *the degree of challenge posed by the work performance*, b) *the characteristics or the human station* (the importance of the relation between the characteristics of the space and the type or social interactions that take

place there –according to Simmel’s approach -1998; cf del Acebo Ibáñez, 1985- is again present), and c) the *harsh environment*.

At the same time, and according to a study of more than 1,000 individuals that had also wintered in the Antarctica (Suedfeld, 1991; Taylor, 1986; Rosner et al., 2000; Peri et al., 1997), it is shown that there are other three critic factors to get a positive performance while dwelling and working in the White Continent, namely: *a) expertise*, *b) stability* (mental health), and *c) sociability*.

Returning to the *total phenomenon approach*, once again we can see that the different variables mentioned in these studies are correlated in some way or another, i.e.: the degree of challenge posed by the work performance is related to the expertise of the inhabitants; the characteristics of space (the infrastructure and architectural design, such as places for leisure time, spaces for intimacy or privacy, and for social life and interaction) are closely related to stability and sociability; and all of them with the extreme environmental and cold weather conditions.

Nevertheless, as usual there are also “hidden variables”, several times not mentioned, but always present, such as: i) *highly motivated and self-selected personnel*, who volunteer to dwell and work in these environments for long time, show high levels of psychological adaptation; ii) *individuals value-oriented* (in terms of science research, environmental needs, national interests, climate global concerns, etc.) are in better conditions to overcome difficulties and obstacles created by isolation and harsh climate conditions (cf. E. del Acebo Ibáñez, 2010) ; iii) the existence of *some Antarctic areas more populated than others*, like the Antarctic Peninsula and the King George Island (South Shetland archipelago) where a large number of countries have stations, potentially communicated, diminishes the feeling of isolation (J.S. Mocellin, 1991; Martin Pauls et al., 2009: 1080-1088); iv) the *socio-cultural world of belonging* of the dwellers and workers (and their *Weltanschauungen* thereof), which include non manifest aspects of culture such as values, representations of reality, beliefs, etc.

Adaptation and the results of bio-medical analysis also deal with a *social and cultural perspective*, when speaking about long Antarctic winter stays (cf. Palinkas et al., 1995b y 1995c; Palinkas & Suedfeld, 2008), which means that the relation subject-extreme environment is also interfered by social factors like social class, gender, occupation, types of leadership present in the group, together with non manifest aspects of culture such as

values, norms, representations of reality and beliefs (cf Wood et al. 1999; Steel, 1997; del Acebo Ibáñez et al., 2014).

Image 4: Marambio station (Argentina)



Source: Marambio Foundation

According to several studies, three main factors are described by the winterers as being difficult with which to cope, namely:

1. *Prolonged isolation*, which implies the separation from primary groups (family and close friends) for all members of the expedition (Zuniga, 1962). As Taylor & Brown (1994) state, the principal consequences of this isolation are loneliness, lack of social and affective relations, and loss of usual social rules.

2. *Confinement* in isolated small groups, which implies the lack of privacy, and this permanent presence of others within this relatively crowded space are cause of social conflicts (Stokols, 1987). The *Proxemics* approach –as mentioned above- makes interesting insights to this respect (E.T. Hall, R. Lécuycer, L.A. Palinkas & P. Suedfeld).

3. *Occupation*, that refers to individual and group work, but also to leisure activities and collective tasks. Nevertheless –as Rivolier (1989) states- the inhabitants of the Antarctica during the winter stay have to deal with periods of under-occupation, but also with

times of high levels of work. During winter, leisure may be an efficient way of adjusting to the extreme conditions, but it may also be seen by some winterers as a source of frustration because activities are limited.

As a consequence of these stress factors, psychological reactions are expected to appear in subjects living in such extreme environment, as many studies state (Greg Décamps & Elisabeth Rosnet, 2005; Gunderson, 1974; Nardini, Herrmann, & Rasmussen, 1962; Strange & Youngman, 1971; Natani and Shurley, 1974).

Bechtel & Berning (1991) describe how the performance of those working and dwelling in the Antarctica declines during the third quarter of a mission in such an isolated and confined environment, regardless the total duration of the mission itself. Precisely, the *third-quarter phenomenon* implies that this is the isolation period when the most discomfort winterers reported.

According to Rivolier (1989), psychopathological reactions such as schizophreniform troubles, psychasthenic-obsessional, or paranoid reactions are very rarely reported (less than 2% of the winterers). Cazes & Bachelard (2001) confirmed this percentage in an unpublished French report. Anyway, although very rare, these reactions are severe enough considering the impact they have on the others members of the crew and on the achievement of the established mission. The size of the group, the harsh environmental winter conditions and the consequent isolation and confinement make a worst impact to the subjects' mood and the group performances.

Strange and Klein (1973) revealed clusters of symptoms that were described in terms of depression, hostility, sleeping difficulties, and a decrease in cognitive efficiency. Within each of these clusters, psychological and physiological symptoms are associated with one another.

The psychological discomfort and the events that occur during the winter do not affect all members of the group equally (Wood, Lugg, Hysong & Harm, 1999). Inter-individual differences, such as personality and the position of the winterer at the base (researchers or support personnel), are not inconsiderable when understanding the appearance of stress reactions. A previous study run at French sub-Antarctic bases revealed differences of adaptation between these different groups of winterers but also between those who were wintering for the first time and those who had already wintered in the Antarctica (Décamps & Rosnet, 2005). The data that have actually been collected by the bases from the

other nations who are members of the Scientific Committee for Antarctic Research (Italy, Argentina, and Australia) will also allow us to draw more informed conclusions concerning cross-cultural differences in participants' reactions toward stress.

Furthermore, the diachronic approach of the stress reactions is of great interest for understanding the way how the winterers adapt to the stressful environmental conditions of polar wintering.

Cazes and Bachelard (2001) reported compensation between physical symptoms and the hostility that appears in interpersonal relations. However, Mocellin and Suedfeld (1991) conclude that the polar experience was not generally aversive and stressful.

Most of the time, the stress reactions and the behavioral responses of the winterers are useful, as suggested by Palinkas (1992), who described *long-term positive effects of wintering-over*. Most of the reactions are not the expression of an inability to cope with stressors and should be considered as the normal reactions of the winterers. Décamps (2005) proposed to name the different regroupings of stress reactions that appear during the winter-over as *the adaptive reactions*.

So, and as we mentioned above, it can be stated that *the third quarter of the exposure to an extreme environment* is the period when most participants will report the most discomfort, as Bechtel and Berning (1991) stated. Other studies continued with this hypothesis (Palinkas et al., 1995; Palmi, 1963; Rohrer, 1961). Sandal (2000) confirmed this finding by observing a decrease of well-being and optimism in the second half of the stay. She also reported an increase of aggressive behaviors and observed that this phenomenon may influence coping strategies. The object of that research article is to study the evolution of the different categories of stress reactions during a winter-over by analyzing data collected with an observation grid. Moreover, changes should also be observed concerning the social, physical, and occupational reactions. Referring to Gunderson's (1963) classification (stability, compatibility, and ability) and to Rivolier (1974), Cazes, Rivolier, Taylor & McCormick (1989) they proposed that the *psychological adaptation* should be observed through four categories, namely:

a) *thymic reactions* (mood variations, anxiety, negative or pessimistic feelings, boredom lack of self-confidence or self-esteem, decision-making difficulties, oversensitivity, hyperactivity);

b) *social reactions* (verbal or physical aggressiveness, fear of being misunderstood or underestimated, increasing independency on others, irritability, distrust, self-centeredness, over-dramatization of incidents;

c) *somatic reactions* (sleep disturbances, loss or increase of appetite, loss of weight, stomach or abdominal pain, headaches, fatigue, back pain, alcohol and/or drug abuse;

d) *the occupational reactions* (overinvestment in work, lack of interest for leisure activities, lack of concentration difficulties and inability to complete any task, under-involvement and less participation in expedition and leisure activities.

The Adaptability Questionnaire (ADQ) proposed by Cazes et al. (1989) to study psychological adaptation is based on these four categories. Rivolier (1992) named the difficulties encountered by the polar workers *winter-over mental syndrome*. Nevertheless, in all cases the conditions seem to get back to normality only many months after the re-entry (P. Cenni, 1997).

In sum, as many studies conclude, environmental factors associated with high latitudes (cold, darkness, altitude) appear to represent a positive influence on mood and behavior during the first half of winter-stay and a negative influence during the last half of winter-stay. However, latitude is also associated with *social* (isolation, confinement) and *physical* (cold, darkness) *environmental stressors*.

Men and women who winter-over at scientific research stations often exhibit a complex of psycho-physiological symptoms in response to these stressors. However, this experience also appears to provide *long-term health benefits*. In fact, it is argued that the psychological symptoms are themselves part of the process of coping and do not necessarily represent an inability to adapt to the extreme environment.

Coping is viewed –as Lawrence A. Palinkas states- as a process of negotiation leading to a compromise between individual and group needs. The cultural systems of Antarctic research stations are both a product of this negotiation and a set of normative and pragmatic rules regulating this process. Further, this process fosters the acquisition of new strategies or resources for coping with subsequent stressful experiences, as a sort of socialization process that helps to better overcome problems in different areas and moments.

The psychological discomfort and the events that occur during the winter do not affect all members of the group equally (Wood, Lugg, Hysong, & Harm, 1999). Inter-individual differences, such as personality and the position of the winterer at the base (researchers or support personnel), are not inconsiderable when understanding the appearance of stress reactions. A previous study revealed differences of adaptation between these different groups of winterers but also between those who were wintering for the first time and those who had already wintered in Antarctica or at French sub-Antarctic bases (Décamps & Rosnet, 2005). The data that have actually been collected by the bases from the other nations who are members of the Scientific Committee for Antarctic Research (Italy, Argentina, and Australia) will also allow us to draw more informed conclusions concerning cross-cultural differences in participants' reactions toward stress.

Furthermore, the diachronic approach of the stress reactions is of great interest for understanding the way in which the winterers adapt to the stressful environmental conditions of polar wintering.

4. Towards a Reflexive South

In different approaches to the Arctic issues, some authors speak about the “reflexive North” (i.e. Aarsæther & Bærenholdt, n/d) to stimulate the discourse on local level development. This can be related to some of the theoretical fundamentals mentioned at the beginning of this work, mainly those which highlight the circumpolarity as a *total -multidimensional and interdependent, phenomenon* where the relation between territory, inhabitants, social relations, socio-cultural issues and environmental conditions are inextricably united. Integration reinforced by roots, community attachment, meanings, values, beliefs and representations of reality.

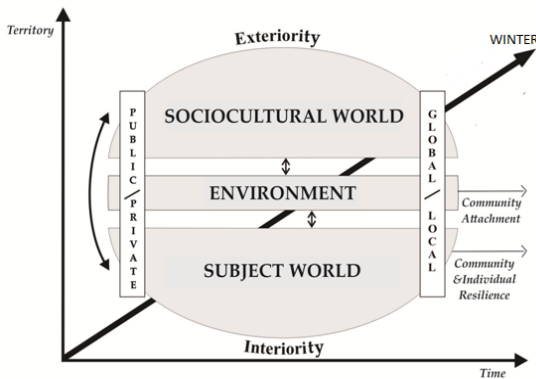
Consequently perhaps it is also possible (and necessary) to speak in terms of “*reflexive*” *extreme regions* (cf. Lash, 1994), what in a way represents a revisit to the invitation that the philosopher Bachelard does when he refers to the “*interiorization of the exteriority*” and the “*exteriorization of the interiority*”, the crossing of which is the angle stone for that “reflexivity”. More than an individual property, reflexivity is a communitarian one dealing with identity.

Reflexivity is not related to local development in strict sense, but - as different authors state (cf. Castells, 1976, 1998; del Acebo Ibáñez, 2000,

2007, 2010)- is related to the ways that a given local community emerges as *meaningful responses* to globalization and individualization. That is, a revisit to the rootedness phenomenon.

To really understand the new ways of inhabiting the Antarctica represents a real challenge because those ways, coming from the global issues, show a sort of paradox: while this globalization process bombards in different ways the local community phenomenon all over the world, the attempts to inhabit the Antarctica face the need to reinforce a *locality* approach to survive over all its restrictions and climate obstacles. In fact, the Antarctic life shows new routines and adaptive strategies where new forms of localities and identities are established in a process of institutionalization (del Acebo Ibáñez, 2018, unpublished). As we have already pointed out in another place (del Acebo Ibáñez, 2017) we can see many of the dimensions mentioned in the following figure:

Figure1: *Extreme Winter. Between exteriority and interiority*



This phenomenon is not new, as it has been developed during long time in northern population and communities, presenting two dimensions or meanings, namely:

- a) *structural reflexivity*, which involves a process of change of social structures through social practices, and
- b) *self-reflexivity*, which refers to the process where social actors consider their own social practice, questioning also the meaning and importance of those processes of change (Lash 1994: 115).

It must be said that “reflexivity” is not mainly and primarily an individual property, but a *communitarian* one (cf. Lash, 1994). That is why those who participate and contribute to the construction of this reflexivity are not only who winter-over in the Antarctic stations, but also the inhabitants living in near socio-cultural areas, proximity that must be read in terms of shared geography, climate, environmental concerns or nationality. In this sense we have been developing during the last fifteen years comparative studies of inhabitants of different Argentine cities and from other countries (Reykjavík, Jyväskylä) about their representations, perceptions, attitudes, and behaviors in relation to the White Continent (del Acebo Ibáñez, Gunnlaugsson & Pyykkönen, 2014).

In a comparative research we devoted to young inhabitants aged 15–25 of the Patagonian city of San Carlos de Bariloche and the city of Buenos Aires (del Acebo Ibáñez & Costa, *Polar Record*, 2010) the data collected brought us to these conclusions:

- Antarctica tends to be seen as the *Terra Incognita*. The high percentage of subjects that do not answer or say that they do not know the Antarctic issue can be summed up as a predominant ‘couldn't-care-less’, indifference many young people demonstrate with respect to the continent.
- The *imaginary Antarctica*, as a fruit of an *aesthetic, poetic, and utopian vision* is present among people with a lower level of consumerism-orientated life, low *anomie* level and a high grade of *potential participation*, that is, individuals endowed with sufficient energy to experience concepts in which Antarctica rises as a metaphor of beauty, mystery, purity, virginity, and the last shelter.
- Conversely, a *more pragmatic and conflict-aimed vision* of Antarctica is to be found in a higher ratio among young people with the highest socio-economic level (SEL).

5. Antarctica, in Search of an Identity

As Friedman affirms (1995: 86), “the practice of identity is about identification of an existential world, the attribution of meaning to the world, to objects, persons and relations. This practice identifies the self as it identifies the world.”

Although shared meanings and identities have been constructed at first by national-level processes, the feasible Antarctic identity is based

both at space and time basis as it happens in every circumpolar national identity, but together with a founding and in some sense heroic attitudes.

The complexity of the Antarctica is not only in terms of Ecology, natural and social sciences and other scientific fields, but also because of its convergence of aesthetics and ethics, reality and poetry, virginity and pollution, conservation and potential depredatory behaviors, together with national and international approaches.

This is one of the reasons why the concept “Antarctic social identity” mentioned by different authors (cf. Ron Roberts, 2011; Wheeler, 1999) is so important. In fact, this identity is closely related to concepts we have already mentioned, like “mission”, “heroism”, “founding spirit” (*homo conditor*), “adventure” or “risk”, always present along the time in the ways of inhabiting the White Continent.

This is also present in the people that usually work sailing in the Southern Atlantic and Pacific Oceans, close to the Antarctica. We have developed a research project to this respect on board the Oceanographic Navy “*Puerto Deseado*”, Argentine unique ship which operates with a jointly civilian and military crew in scientific campaigns organized by both the Argentina’s National Science and Technology Research Council and the Naval Hydrography Service (del Acebo Ibáñez, 2011). The Southern Atlantic Ocean and its islands represent an important area close to the Antarctica where many people work every single day of the year, showing a maritime identity with some convergences with the above mentioned Antarctic identity (sense of heroism, sense of risk and adventure, team spirit, harsh climate conditions) (see *Anexus* with parts of interviews run to military and scientific crew on board an oceanographic Argentine ship during the 2011 scientific campaign in the nearby of the Antarctica).

Antarctic “spatialities”

The Antarctic space, including of course the stations, is not totally homogeneous as there are heterogeneous cultural spatialities constitutive of the polar south (Collins & Stevens, 2007; del Acebo Ibáñez, 2018).

As Collins & Stevens state, while Antarctic spaces are given meaning in the imagination and represented and contested through discourse, grasping their complex spatiality requires understanding the concrete materiality which people have produced there, and the ways in

which this spatial materiality is interlinked with social processes and meanings.

Built environments are “secreted” by specific social formations, which design, construct and assign social activities to them. Built spaces are also crucial to the production and reproduction of a given social formation; they can give it cohesion and continuity. This was clearly stated by Georg Simmel (1985) in his studies about the characteristics of the space that influence the social interactions, and the characteristics of those interactions that influence the space (cf del Acebo Ibáñez, 1985). Lefebvre (1991) notes that any “social existence” that fails to produce its own space would be a strange entity, a kind of abstraction unable to escape from the ideological or even the “cultural” realm with a feeble degree of reality.

It is time that the complexities of these spatialities of Antarctic colonization are given critical attention. Colonial spatialities, as Jacobs (1961) argues, are not simply a matter of geopolitics, representations, or inhabited buildings; rather, “they exist in the ‘opaque’ intersections between representational practices, the built forms and a range of other axes of power”. It is these spatial intersections – how the various cultural technologies of buildings, texts, laws, and geopolitics combine into powerful Antarctic spatialities (Collins & Stevens, 2007).

This is also reinforced through the museums that the Antarctic has. In fact, Argentina maintains museums there and exhibitions supported by the Argentine Antarctic Institute and the National Naval Museum, allowing the rescuing of memory (Carlos Vairo et al., 2007). What is more, there is *historical Archaeology* which includes the search, localization, classification, conservation, restoration and maintenance of sites, artifacts, and historic buildings; these recovered elements become part of the museological activity.

This is the case of the “MUSEOANTAR” *Argentine Program*: it fulfills the commitment taken on by the Argentine Republic as a country member of the Antarctic Treaty, so safeguard the heritage of the Antarctic continent within the geographical area of its influence. Following the regulations of the Antarctic Treaty, Argentina through this Program has collaborated intensively in the protection of different international monuments in the Antarctica, such as: two shacks built by the South Pole Swedish expedition (1902 and 1903) in Snow Hill Island and Hope Bay (the shack in Snow Hill was declared Historical National Monument by the Argentine government in 1965; one shack made of stone on Paulet Island

built in 1903 by the Norwegian Carl. A. Larsen (cf Vairo, 2007). The need to protect the heritage of the Antarctica was emphasized by the Antarctic Treaty parties in Bonn during 1991 at the *XVI Antarctic Treaty Consultative Meeting*, when it was distinguished the development of the MUSEOANTAR Argentine program as an example to be followed by the Antarctic community.

Image 5: *Esperanza Station (Argentine permanent base)*



Source: DNA

Image 6: *Marambio Station (Arg.)*



Source: DNA

Image 7: San Martín Station (Arg.)



Source: DNA

.....

Image 8: Orcadas Base (Argentina)



Source: DNA

Identity is of course close related to local development, but also to the fact that those local communities emerge as *meaningful responses* to globalization and individualization (cf Castells, 1976, 1998; del Acebo Ibáñez, 1993, 1996, 2000, 2006, 2010)

To really understand the new ways of inhabiting the Antarctica represents a challenge because they are coming from the globalization

process, representing a sort of paradox: while these process are bombarding in different ways the local community phenomenon all over the world, the attempts to inhabit the Antarctica need to reinforce this *locality* approach to survive over all its restrictions and climate obstacles.

The Antarctic life shows *new routines* and *adaptive strategies* where new forms of localities and identities are established in a process of institutionalization.

It means that a sort of *emotional geography* emerges (cf. Ron Roberts, 2011), like a *founding representational myth*, linked to the “historic missions”. It means that Antarctica works as a metaphor of purity, wilderness and virginity, being still nowadays the *Terra Incognita Australis*, a sort of metaphysic sanctuary, a pristine confine of the planet.

As the existentialist German philosopher Martin Heidegger (1955) states, “...*the human being does not dwell because he/she builds; instead, he/she builds because previously dwells*”, we believe that the Antarctica is inhabitable not only because of the developing technologies, but mainly because of the human being’s nature as *homo conditor* and dweller: heroism, fights, dreams, feats, which is all related to *adventure*. High mountains, oceans and the extreme winter appear as mirrors of the soul. Hence, these are “the roots for the primeval fight, the gallantry and heroism that protect us when we feel overwhelmed by the *extrinsic immensity*” (Bachelard, 1993: 285s). In other words, the dialectic between the vast extension of the world and the vast extension of the human mind, solved within a growing, existential synthesis. The fact is that, for Simmel (1999: 24), any adventurer “always believes that he is safe”, while Bachelard (1993:287) affirms that this is because the greatness of the human being is fed by the greatness of the world.

When facing the elements –the sea, the mountain, the cold weather, humans are joyfully *alone*. This is so because –as Bachelard warns us, we are facing a loneliness ideal so necessary for the cosmic challenge psychology (cf. E. del Acebo Ibáñez, 2004-2005).

ANNEXE:

“Research project on board the Argentine Oceanographic Navy ‘Puerto Deseado’ during the 2010-2011 scientific campaign in the Southern Atlantic Ocean, near to the Antarctica”

The Southern Atlantic Ocean and its islands represent an important area close to the Antarctica where many people is working every single day of the year. For this reason we develop a research project on board the Oceanographic Navy “Puerto Deseado”, Argentine unique ship which operates with a jointly civilian and military crew in scientific campaigns organized by both the Argentina’s National Science and Technology Research Council and the Naval Hydrography Service.

With 76 meters in length, and a 13 meters beam, she displaces 2,400 metric tons at 14 knots, this ship is apt at sailing in polar zones. Scientific activities constitute her working frame, with both national and foreign institutions. In 1982, during the conflict in Southern Atlantic, she participated as a hospital ship.

We left the Port of Ushuaia on April 8th, 2010, at 08:45, with a wind intensity of 8 knots and a temperature of 10° C. After crossing the Beagle channel coast, “Les Éclaireurs” lighthouse, the Ushuaia bay, the Drake Passage and the Cape Horn meridian zone, the wind-tempest intensity was 35-40 knots and increasing, with a barometrical pressure of 963 Hpc, reaching a lower pressure centre.

When the wind-tempest intensity decreased, we started to interview some members of the crew. The result of the research and the techniques applied (participant observation and semi-structured interviews) shows the sense of mission of their job (being military, scientists or common worker), the team spirit, the sense of community, the openness to Nature, the deep respect to the ocean, the importance of “adventure”, the seamen tradition, the privilege to sail and work in the Southern Ocean.

Interview 1: Lieutenant Commander, 2nd Commandant of “Puerto Deseado” ship

“[...] In the Navy, they always say that a ship is a “piece of iron”. However, when you are on board her, that *iron* gets alive –and you are somewhat involved, affectionate with that way of living, sharing your life with it, and your NCOs. Finally, you become fond of the ship in spite of

her movements. At times, she treats us badly but, eventually, you become attached to her [...]”.

Interview 2: Lieutenant commander, Commandant of “Puerto Deseado” ship

“[...] A Commandant is the person absolutely responsible for all and everything happening on board. It could even be possible to compare him to a family man. Actually, his task lies in the management of working people. At time, when I talk to the crew, I insist on the virtues of team working where all of us assess different aspects, all of us participate. Of course, in today’s life, thanks to a good attitude, you can become either a hierarchical leader or a spontaneous leader. When we consider what History is, it is quite clear that the sea has been the force leading humans to discoveries, inspirations, and adventures. So, if you analyze those discoveries, the campaigns of those great seamen who, obviously, made history you understand that their deepest inspiration, their deepest desire was leaving the land behind and setting sail, rushing to that unknown world that was a world for adventure –and keeps being so [...]”

Interview 3: Lieutenant commander, Commanding officer of the Hydrographical Ships Association.

“[...] As far as activities aboard boats are concerned, you are in the right position to assess all and every man’s tasks –moreover, when you are on board a smaller ship: there, team work is absolutely fundamental. And that does not only concern the man who is on guard on the bridge. If machines do not work, ship does not move on. If the oven does not work, crew cannot eat. If the radio is mute, you cannot communicate. A well integrated working team in harmony –well, these are not only people who work under a hierarchical relationship –this team becomes as a second family for you.

When you are on board ship you haven’t any other place to go... so, in case of any accident, averages, anything on board, you know that your own life depends on the ship. In other words, if some situations are risky, risk is due to both aspects pertaining to the mere mean you are sailing on –that is, first, the ship. Then, the sea.

Inasmuch as you live here, you have to deal with some tasks that, at times, could be quite risky. For instance, you have to anchor –well, this includes really strong tensions. You have to moor –well, there have been many accidents all around the world. And an accident involving a mooring rope could signify an amputated leg, a broken arm. Indeed, such accidents do happen. For example, the place we are now, this part of the Atlantic Ocean called Argentine Sea, well the winds cause heavily rough waves[...].”

Interview 4: Lieutenant commander (Ret), Captain / Oceanographer

“[...] As far as I am concerned, ocean is an adventure world. A world wherein you are amazed, well: wondering and waiting for wonders. Not everything has been solved down there –so, if this not an adventure world, what is it?

Ocean is a world wherein humans keep being astonished, and this is most important. As I’ve just said: not everything has been solved down here. I should say, this is a place where humans cannot mature –if, for you, “maturing” means enjoying so much experience that you don’t believe in anything else, now. Indeed, oceans are a world wherein humans can afford to keep being immature...Even though I am 80, I know there are still things to see and discover down there. Oceans are just that: they’re life, a life that keeps amazing us.

Well, I really don’t know whether you have to live so safely – because life includes most beautiful things but, at times, “the end” is the cost you have to pay for the most beautiful things, i.e. problems, diseases... so is life. And ocean is just like that: the possibility to be unsure. Being amazed is just as I said before: you are not only open to something beautiful but you are not sure to be safe.

I sail since I was a baby: yeah, I’ve on board one photo where I’m sucking my dummy... From then on, so many things happened. I really don’t remember when I set sail for the first time, and I don’t remember when I read my first adventure story... I grew up with Salgari, with Jules Verne, with Jack London, with Melville. Moby Dick... I was astonished, not only with adventures, but also with the study of characters, of human profiles...

Adventure has been a part of my life since a very long time –and still is. I didn’t construct it over time: over time I have incorporated it, with

some variations, with other orientations. But I keep dreaming with adventure. Life is adventure. You do not rehearse life, you live, period. Love and adventure are parts of a same aspect, I think. No rehearsal, you live. And if you are afraid, you don't live. No mercy for shyness in love, and no mercy for fear in adventure. That's it. [...]"

Interview 5: Dr. in Biology from the National University of Buenos Aires, Head of the 2010-2011 Campaign.

"[...] What we are studying now is the whole Patagonia-Austral area, included into a zoo-geographical Argentine Province, the Magellan area covering from the Tierra del Fuego Island, the Santa Cruz Province, and the south of the Chubut Province up to the Gulf of St. George to the North. Waters are cold indeed –these are sub Antarctic waters –and really Antarctic ones as regards the Tierra del Fuego Island. So, such cold waters cause the fauna living there to be most diverse.

An interesting aspect of scientific research lies in the fact that you have to deal with strong challenges. You ask you something and you have to find the answer. At times, you reach the answer through different ways. However, when you get it, I think that's an immense satisfaction. [...]"

Interview 6: Coastguard, Head of General Detail .

"[...] Vocation is just fundamental for a service man. This is so because this is what you want to do, and enjoy doing –and this is why we shall put our work before our family life, our homes: our passion lies in flying the flag in the high seas.

My maternal grandfather was on the merchant navy. It is so strange –when you are a child, to find out that some people are so happy to live far from home, to know sea ports all around the world... and the stories he told me –I was so interested... I think that “my marine part” came from him to me.

If there exists something dramatic is to be on deck, at night – knowing that within miles and miles around you there isn't anything, you only see the moon and millions of stars... Those are unique experiences so few people can enjoy [...]"

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Team Spirit in Football.

An analysis of players' symbolic communication in a match between Argentina and Iceland at the men's 2018 World Cup.

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Abstract

The creation of team spirit is one of the most important and difficult challenges of contemporary sports. Team spirit is on one hand important for team efficiency and team success and on the other difficult to account for due to its emergent and impervious nature. Team spirit is especially important in the midst of the dynamic on-the-field game action where sport teams rely on active communication between team members in order to meet the many challenges of sporting contests. Verbal communication is however often problematic during games and members of a team need to make use of symbolic gestures to communicate. The literature has however been inattentive to the role of symbolic gestures in sports, especially in regard to team spirit and team performance. This paper is a case study of a single football match. It makes use of micro-sociological theory and perspective to account for players' use of symbolic communication and gestures in regard to team spirit. The findings from the analysed match reveal players' use of various forms of symbolic communication and gestures, which could be recognized as positive, negative or neutral for on-the-field team spirit.

Keywords: Symbolic communication, gestures, team spirit, football, agency, micro-sociology

Introduction

I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind (William Thomson [a.k.a. Lord Kelvin]), 1889, 73).

The creation of team spirit and team cooperation is one of the most important and difficult challenges of contemporary sports (Cashmore,

2003, 59; Pescosolido and Saavedra, 2012; Sumpter, 2016, 164). Its importance lies in the potential it has to add to the pool of individual talent and skills of a team. Its challenges are due to its mystique as an emergent (and invisible-to-the-naked-eye) phenomenon. Effective team spirit can be influential in producing teams that become something more than the mere sum of their parts (Halldorsson, 2017; Maymin et al., 2013; Mead, [1934]/1972, 198,329), which in turn makes team spirit “something of a Holy Grail for coaches and team managers” (Cashmore, 2003, 59). But can team spirit be identified, measured and linked to team performance?

One way of identifying team spirit is to watch how teams’ play. Team spirit relies on active communication between team members (Losada, 1999; Snow and Davis, 1995) and is therefore most evident to observers in the game action (See Halldorsson, 2017, 68-70). Team sports are *open skilled* sports—in contrast with *closed skills* in individual sports—since they take place in a collective, dynamic and changeable environment. They rely less on individual talents and more on situational awareness and social interaction than do individual sports (Allard and Burnett, 1985; Poulton, 1957). Thus, communication within teams, in the heat of the on-the-field action, can be noted as mark their strength, bolstering team bonds between players and helping teams face adversity. It is in the midst of the game action—what Goffman identified as “fateful situations” ([1967]/2005, 260)—where both individual and team character is revealed and where team spirit matters the most. On-the-field team spirit is further important because it is dynamic in nature where the spirit of one team can directly affect the spirit of the other team as well. A team which boasts lively and coherent on-the-field communication and team spirit can gain momentum and throw the other team off balance; the opponents may feel overwhelmed and lose faith and/or focus on the task in hand, leading to collective and emergent downward trajectories of the team attitude and performance within the game. All of this makes team spirit such an important topic in team sports.

However, due to the fast action on the pitch, the physical distances between players and the noise levels at professional sport matches, verbal communication is often problematic, so normal communication between players is restricted. Players therefore have to rely on other means of communicating during the action in the field of play. Sport teams are in this respect dependent on the on-the-field symbolic communication of its members towards one another. However, how

members of a team make use of symbolic communication during on-the-field action and, more specifically, how symbolic gestures influence team spirit in sport, has not been addressed to any extent in the current literature (see Ishak, 2017).

This paper is a case study, which sets out to approach team spirit in sport from a micro-sociological perspective. More precisely, this paper sets out to establish a framework for the analysis of team spirit in football by measuring forms of symbolic communication between players during a football match. Special attention will be given to players' agency in this respect, that is, how they use positive or negative gestures towards their teammates in the heat of the game action. Thus, the main aims of this paper are: 1) to establish a framework for the analysis of symbolic communication in football matches through a micro-sociological approach; 2) to identify the main forms of symbolic communication in football games; 3) to account for the use of symbolic gestures by members of two teams (Argentina and Iceland) in a particular game; 4) to raise important issues for further studies on team spirit in sport. The football match analysed in this paper (the case) was between Argentina and Iceland. It was the first match of the two teams at the 2018 Men's FIFA Football World Cup.

Symbolic communication and team spirit

Team spirit has been defined as “an enthusiastic attitude towards working productively with a team or work group” (Dictionary of Sport and Exercise Science, 2006, 206) highlighting the role of individual agency in interactional settings. Team spirit further has a more structural and emergent component to it where a team's spirit is transferred between members of a group through social interaction, and social networks, and therefore takes the form of a contagious and invisible force which emphasizes and highlights the specific team's spirit (Christakis and Fowler, 2009; Halldorsson, 2017; Mead, [1932]/2002; Snow and Davis, 1995; Walton et al., 2012). Thus, team spirit differs from one team to the next where all teams develop their own specific team character, what Fine (2012) defined as its “ideoculture.” A team's ideoculture is embedded within the team's interaction and revealed in the behaviour of its members, influencing the choices they make as a team (Fine, 2012, 34-36). Members of a team act in accordance with the norms of behaviour or particular moods of other team members (Christakis and Fowler, 2009; Smith et al.,

2018). There is further evidence that perceived team affiliation through team spirit takes place through neural mechanisms rather than rational decision-making (Molenberghs et al., 2012). In other words, we instinctively act in accordance with the team spirit which encompasses us.

Cooperative action of members of a team is based on reciprocal-acknowledged attention, which constitutes a form of interconnectedness between team members. Such interconnectedness is characterized by a fluid, shared, collective consciousness on the part of team members and mutual respect between them (Couch, 2017b). Research findings have indicated how team spirit can build bonds between team players and positively affect team mood (Fine, 2012; Fine and Corte, 2017; Halldorsson, 2017; Halldorsson, Thorlindsson and Katovich, 2017; Kraus et al., 2010; Ronglan, 2011, Walton et al., 2012). Team spirit has in this sense been associated with making sports more meaningful and enjoyable (Fine, 2012; Kraus et al., 2010), enabling players to trust each other (Halldorsson, 2017; Ronglan, 2011), boosting team motivation (Halldorsson, 2017; Walton et al., 2012) and helping players through adversity in the action of play (Morgan et al., 2013). Much of this takes place through the symbolic communication of players within a team setting. However, the semiotics of sport teams has not been addressed to any extent in the current literature.

Symbolic communication in sports is generated by interaction rituals in which players provide their teammates with indications of, for example: support, encouragement, anger, disappointment, concern and apathy. Members of a team both provide symbolic cues to their teammates as well as receive such symbolic cues from their teammates, both explicitly and tacitly (see: Polanyi, 2009) which can, for instance, help teams to forge ahead at crucial times or, alternatively, lead to a collective loss of belief among team members. Some research on this indicates, however, that teams are highly vulnerable to negative gestures of individuals, and one "bad apple" can, through an individual apathy, significantly undermine the mood of entire teams (Felps et al., 2006). Nevertheless, by sharing extensive pasts, members of a team can further read such symbolic cues more thoroughly and efficiently than strangers and thus activate important team spirit elements more appropriately (Couch, 2017b, 122-127; Katovich and Couch, 1992).

According to Birrell (2001), meanings, such as of cooperative action, are conveyed through symbolic communication, i.e., through

rituals, gestures, body language, poise and facework people interact with each other, and negotiate the norms of how to do things, within a specific social context (see Goffman, [1959]/1990; [1967]/2005; 1981). Communication within teams, including, e.g., positive gestures, can be recognised as a measure of team spirit and team cooperation (see Couch, 2017b; Faulkner and Becker, 2009; Goffman, [1959]/1990; [1967]/2005; Losada, 1999; Molenberghs et al., 2012). Symbolic communication plays an important role in the signs we use to clarify bonds with others and imbue an activity with meaning for the participants (Verhoeven, 1985, 74). Social actors understand, both through language and from reading tacit expressions in each other's behaviour, the shared meanings of their actions within a particular social context (Becker, 2007; Goffman, [1959]/1990; [1967]/2005; Wilson, 2003)

In this context, Goffman notes: "Everyone knows that when individuals in the presence of others respond to events, their glances, looks, and postural shifts carry all kinds of implication and meaning" (1981, 1). Thus, symbolic interactionists would, in the case of cooperative action, turn our attention to the subtle nuances of human behaviour. As Buban (2017, 66) states, in connection with people going out the door: "it's not *if* they go out the door or not, it's *how* they go out the door." Such phenomena are mundane and are therefore most often taken-for-granted in daily life, and also in sports (Chambliss, 1988). However, those simple forms of symbolic communication are of the utmost importance in sporting contexts, especially in terms of establishing team spirit in the field of play (Halldorsson, 2017, 68-70). Examples from sports for instance exemplify how players use positive symbolic gestures to show support towards their teammates (Pirlo, 2013, 131) and how players seek positive symbolic gestures from their teammates when faced in fateful situations (Pirlo, 2013, 33-44). Likewise, football coach Pep Guardiola notes the symbolic gestures of his players where he, for instance, looks at the reaction of the players on the substitute bench, to see if they are expressing the right symbolic signals when his team scores goals, as to evaluate whether his substitutes are good team players or not (Hughes, 2018, 1). Athletes also perform symbolic acts, such as feigning fatigue, in order to generate a false sense of security among their opponents which provides them with an important edge in competition (see Armstrong 2003, 107). Such taken-for-granted gestures most often go unnoticed but as Zerubavel (2018) has argued; they have remarkable power.

In order to illustrate this core dynamic in sports teams, this paper sets out to apply a micro-theoretical analysis of team spirit in sport. The theoretical approach of symbolic interactionism highlights how meanings are built up and negotiated through interactions—symbolic communication—with others, and how meanings are assembled in symbols, codes and discourse which leads to the establishment of collective representation, i.e., specific team norms and a specific team mood (see Carter and Fuller, 2016; Snow and Davis, 1995). How players of a team act towards each other, on the field, can therefore be regarded a representative of the *symbolic closeness* or *symbolic distance* of the team members towards each other (Couch, 2017a, 17). In this respect, showing good character and team spirit is a sign of “healthy” teams, while showing bad character and weak team spirit is a sign of “unhealthy” teams. This I believe is noticeable when a football game is analysed in the way described in the following pages.

Despite the importance of a positive and supportive team spirit for team performance game statistics have highlighted the physical aspects of games rather than team spirit to any extent. The absence of measures of team spirit and team communication in prominent game analysing tools is particularly noticeable (see, e.g.; Instat, 2018; Poli et al., 2018; Sarmiento et al., 2014). This absence can partly be explained by the fact that team spirit tends to be an emergent phenomenon which is difficult to plan and account for, and partly because a holistic account of the nuts and bolts of team spirit is missing in the literature. Thus, it is one of the main arguments of this paper that team spirit needs to be accounted for, and systematically measured, just like any other element of individual and team performance in sports, in order to provide practitioners with “thicker data” of how to build team spirit and improve team cooperation in sports (Lames and McGarry, 2002; Sennett, 2012, 6).

Methods

This paper is qualitative in its essence. It builds on a case study of a single football match which is analysed through a micro-sociological lens with the aims of identifying key elements of team spirit in game action. However, the paper further makes use of content analysis of this particular match—promoting a link between micro and macro level analysis (see Carter and Fuller, 2016). Content analysis is an objective empirical research method

which studies, gathers and analyses the context of “social texts”, i.e., anything that is written, visual or spoken and serves the medium of communication (Bell, 2001). Some research has been done via content analysis on nonverbal behaviors in relation to physical touch in close-contact sports such as basketball (Kraus et al., 2010; Pellicier, 2013) and handball (Moesch et al., 2015). However, I have not come across any research that applies content analysis to study symbolic communication between team members as it is utilized in this study or specifically in football.

The use of audio-visual recordings to study behaviour and social interaction is of course not something new to symbolic interactionists. In the late 1970s, the Iowa School of Symbolic Interaction, led by Carl J. Couch, pioneered the use of audio-visual technology to study face-to-face interaction in small groups (see in Katovich, 2017). The CRIB (The Center for Research on Interpersonal Behavior) helped researchers to study the second-by-second nature of social interaction processes, which daily-life observers usually see once only (Katovich, 2017; Miller et al., 1975). Video recordings of social acts and interactions in small groups allowed researchers to go beyond witnessing social encounters in real time only: to rewind, replay and freeze-frame sequences of social and symbolic communication through audio-visual technology and thus analyse such communication in greater detail and with more precision than before.

This paper builds on micro-sociological theory of symbolic social interaction (see Carter and Fuller, 2016; Snow and Davis, 1995). Its methods are based on the same principles as the Iowa School of Symbolic Interaction used in analysing symbolic communication and cooperation in groups: studying symbolic social acts through the use of audio-video technology. This analysis, however, was not conducted in an experimental environment: instead it makes use of content analysis to account for individual agency and team spirit in a live television broadcast of a football match. The match, Argentina – Iceland, was played in the first round at the group stage level the 2018 Men’s FIFA World Cup on June 16 and ended in a 1:1 draw¹. The result of the match came as a surprise to most football

¹Slater et al. (2018) analysis of games in the 2016 Men’s European Football Championship showed that teams that showed more passion during the playing of their national anthems were more successful than those that did not show passion during the playing of their national anthem. More specifically, the passionate teams were less likely to concede goals than their opponent teams because of better teamwork on the pitch. This particular match

fans since Argentina was considered the strong favourites to win the match. This paper sets forward one explanation of this surprising result.

This paper makes use of the official live FIFA broadcast, which should not be biased towards one team or the other. However, a content analysis of a football game only grasps a small portion of the symbolic communication that takes place between the players during a whole match and therefore does not provide a holistic account of all action in the game. The analysis however can be regarded as being based on a sample (what is aired in the live television broadcast) from a data population (everything that happens during a whole game) where the sample is believed to be representative of the population.

Since the tools for analysing symbolic communication in football teams are practically non-existent, I had to develop the tools I used as units of analysis. First, I watched the match between Argentina and Iceland twice, trying to note key forms of symbolic communication in the field of play. Along the way I took notes. I further identified and coded key themes from which I constructed a frame of analysis to enable me to analyse the game more systematically. Second, I made my analysis, based on three viewings of the game. In the first, I noted only acts of symbolic communication by the Argentinian players. In the second I noted only acts of symbolic communication by the Icelandic players. All acts of symbolic communication for the two teams were marked minute-by-minute. In the third viewing I checked and revised my previous notes for both teams. In all the five screenings of the match I frequently stopped the game, rewound and replayed and/or freeze-framed certain moments of the broadcast game to account for what was really happening in the heat of the action.

between Argentina and Iceland was selected as an example of opposing teams which at first glance seemed to represent different levels of team spirit. During the national anthems of the two teams it was apparent that the body language and gestures of the Argentinian and Icelandic teams differed remarkably. While most of the Icelandic players (and coaches) sang with the national anthem as they stood with their arms around their teammates, none of the Argentinian players or coaches sang their national anthem. The Argentinian players furthermore stood far from each other and the goalkeeper even faced in a different direction than his teammates. Viewing the conduct of the players (and coaches) of the two teams during their national anthems, as well as their physical posture and closeness, pointed to high levels of *symbolic closeness* in the Icelandic team but to *symbolic distances* in the Argentinian team. The decision to select this match for analysis for this paper was in part to test whether those first impressions held true by examining the symbolic communication of members of both teams during the match itself.

The Findings section identifies the key forms of symbolic communication coded in the analysis. It also presents the descriptive statistics of the number of times those symbolic communications were noticeable in the television broadcast for the two teams². Finally, in order to account for the role of the symbolic communication noted in the match—and derived from the theoretical stance of Durkheim (see ‘the collective conscience’, [1915]/1965) and Goffman ([1959]/1990; [1967]/2005) (see above)—I identified them as positive, negative or neutral/unknown for the formation of a healthy team spirit.

Findings

The analysis of the 2018 Football World Cup match between Argentina and Iceland revealed various kinds of symbolic communications and gestures from players of both teams. In all, 252 gestures were recorded in the televised broadcast of the 90-minute football match; 95 by Argentina and 157 by Iceland. Table 1 presents the descriptive statistics for both teams in the categories which emerged from the content analysis.

Table 1. Symbolic communication in Argentina versus Iceland at the 2018 Men’s Football World Cup.

	Argentina N (%)	Iceland N (%)	Total
1. Showing of acknowledgement towards teammates	18 (26,5)	50 (73,5)	68
Clapping of hands	3	31	34
Making fist	0	6	6
Showing thumbs up	2	1	3
Other hand gesture	3	2	5
Goal celebration	10	10	20
2. Physical acknowledgement of teammates through touch	6 (25)	18 (75)	24

²All accounts of players’ agency in terms of positive and negative gestures were counted. For instance, if three players clapped their hands because the goalkeeper made a save it was counted as three positive gestures (one by each of the three players).

Clap on the back/shoulder of teammate	0	8	8
Give teammate high 5/10	4	5	9
Give teammate a hug	2	5	7
3. Provide symbolic motivation to teammates	0 (0)	6 (100)	6
Clapping of hands	0	2	2
Making fist	0	4	4
4. Show signs of joy	1 (12,5)	7 (87,5)	8
Smile	1	5	6
Smile and showing thumbs up	0	2	2
5. Telling teammates off	5 (62,5)	3 (37,5)	8
Verbal reprimand	2	1	3
Reprimand with hand gesture	3	2	5
6. Showing of frustration	11 (55)	9 (45)	20
Facial expression/body language	5	2	7
Hand gesture	4	7	11
Bury head in hands	2	0	2
7. Play organization with hand gesture	24 (45,3)	29 (54,7)	53
8. Gestures towards referees*	22 (46,8)	25 (53,2)	47
Complain	10	12	22
Show disbelief	1	2	3
Recognition	0	4	4
Tactical	11	12	23
9. Unknown gestures	6 (40)	9 (60)	15
10. Other gestures	2 (66,7)	1(33,3)	3
Total:	95 (37,7)	157(62,3)	252

Total positive	25 (23,6)	81 (76,4)	106
Total negative	16 (57,1)	12 (42,9)	28
Total neutral/other	54 (45,8)	64 (54,2)	118

* Gestures towards referees were counted collectively - not individually

Firstly, obvious deliberate physical and symbolic gestures, which can be identified as positive for team spirit, could be seen being used between players and their teammates during the match (Table 1, sections 1-4). The players sent “thumbs up” gestures, clapped their hands, clapped on a player’s back or shoulder or gave a teammate a hug in acknowledgment of their efforts (see Picture 1). They also made fists with their hands, signalling a fighting spirit, and gave each other “high-fives”, which is a form of ritual in team sports.

Picture 1. An Icelandic player acknowledging the effort of his teammate with a thumbs-up gesture (screenshot from www.ruv.is. Retrieved August 10, 2018 from: <http://www.ruv.is/sjonvarp/spila/hm-2018-i-fotbolta/18198>).



The players could also be observed celebrating successful actions in the game, such as scoring goals. When the teams scored, which is a major element in a football match, the players celebrated emotionally by huddling together and hugging each other, which was accompanied by the expression of joy (or relief) in the form of screams or shouts. All players of both teams except the goalkeepers were seen taking part in celebrating goals. The players were also seen celebrating lesser achievements in the game, such as winning free kicks or goal kicks and even making a clearance which resulted in a corner kick for the other team. This they did by clapping their hands, making fists and/or shouting. These actions have

been used to celebrate “the small wins”, providing team members with confidence and short-term momentum (Halldorsson, 2017, 74-75; Moesch, et al., 2014; Mortimer and Burt, 2014).

All the above-mentioned gestures can be defined as positive gestures (see Durkheim, [1915]/1965; Goffman, [1959]/1990; [1967]/2005; Halldorsson, 2017, 68-70). They were mostly deliberate and function as an expression of recognition and/or encouragement from a player to his teammates. As Table 1 shows, the Icelandic players were much more likely to use positive gestures during the match than the Argentinians. The Icelandic players were far more likely to show acknowledgement to their teammates; both symbolically and/or through physical touching and closeness. They were also more likely to provide their teammates with symbolic motivation and to enjoy themselves on the pitch, this being observable in the form of smiles and/or making jokes than the players from Argentina. Positive gestures by the Icelandic players were noted on 81 occasions, against 25 occurrences among the Argentinian players.

Picture 2. An Argentinian player showing his frustration while the Icelandic goalkeeper is celebrating “a small win” (not conceding a goal) by screaming and making a fist with his hand (screenshot from www.ruv.is. Retrieved August 10, 2018 from: <http://www.ruv.is/sjonvarp/spila/hm-2018-i-fotbolta/18198>).



Second, as regards negative gestures (Table 1, sections 5-6), the content analysis reveals that the players were occasionally observed telling each other off. This involved other examples of deliberate gestures, consisting mainly of shouting and/or making hand gestures towards teammates. Showing frustration on the pitch can also be termed as a negative gesture

because it sends out signals of disappointment and anger to other players³. Such gestures made by players involved shouting, looking up to the sky, punching the air and/or forcefully clapping their hands. These gestures seemed spontaneous (see Picture 2). The Argentinian players were noted to express negative gestures 16 times, the Icelandic players 12 times.

However, as Fredrickson and Losada (2005) have argued, negative gestures are also important for teams to reach their maximum effectiveness. Teams do not succeed by only providing positive feedback. There needs to be some balance between keeping everyone happy and keeping everyone on their toes. In other words, in small teams, there has to be the right balance of fun and discipline, or as in this case between positive and negative gestures. According to Fredrickson and Losada (2005) however, the positive gestures need to significantly outweigh the negative ones.

Picture 3. Missed opportunities. An Argentinian player looks down to the ground after failed attempt but there are no reactions from his teammate, illustrating the social distances within the team (screenshot from www.ruv.is. Retrieved August 10, 2018 from: <http://www.ruv.is/sjonvarp/spila/hm-2018-i-fotbolta/18198>).



Third, players frequently used hand gestures as communication for team tactics and the structure of their game (Table 1, section 7). Those hand gestures signalled other players where to position themselves or where to send the ball and represent the tactical teamwork in the field of play. The gestures were strategic and intentional. Structural gestures could be defined

³Showing frustration is however an emotional release which illustrates that players care. In other words, the showing of frustration can be seen as a positive gesture when contrasted with players showing apathy.

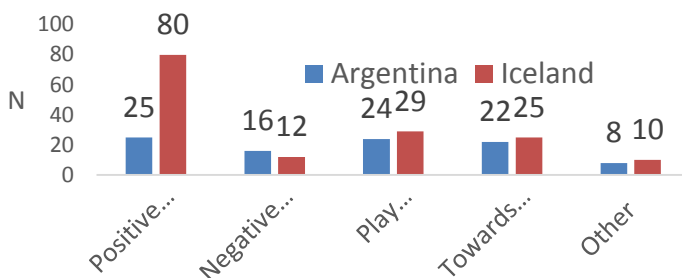
as positive since they increase in-team communication and lead to team harmony. However, they could also be defined as neutral, since they are a part of a pre-organised and agreed game strategy, initiated by the coach; they are therefore defined as neutral here as is it questionable whether they derive from the players' agency or from instructions from the coach. The Argentinian players were observed using structural gestures 24 times and the Icelandic players 29 times.

Fourth, some of the symbolic communication in the match was directed at the referee (Table 1, section 8), this is also defined as neutral here. Players of both teams complained to the referee or his assistants, expressing sheer disappointment or disbelief (spontaneous) and/or tactical purpose (intentional) in order to try to influence and/or turn the referee's decisions. The players of the two teams did this in similar measure; however, the Icelandic players were further seen to show appreciation for the referee's decisions where on four occasions they clapped the hands for the referee, showed thumbs up and even smiled in communicating with the referees. This was not the case with members of the Argentinian team.

Finally, there were some gestures made in the match to which I could not attribute meaning (Table 1, sections 9-10), i.e., whether the gesture was towards a teammate, opponent or referee, or whether it was positive or negative. They included various hand gestures, facial expressions or other social acts during the game.

To sum up, both teams made use of various forms of symbolic communication in the match (see further in Figure 1). Some of them can be seen as positive for team spirit; others as negative. Some were deliberate, others spontaneous. And finally some of those gestures of communication were directed towards teammates, others at the referees or opponents. All in all, the 90-minute broadcast football match provided rich data on the symbolic communication of the players and teams.

Figure 1. Comparison of symbolic (physical) gestures of both teams, Argentina and Iceland, from the 2018 World Cup match.



Discussion

The findings of this case study reveal that in this particular match the Icelandic players used symbolic communication, and especially positive gestures, to a far greater extent on the field than did the Argentinian players. Thus, it can be claimed that the Icelandic team had better team spirit and more enthusiastic, engaged and positive teamwork than the Argentinian team did in the match. It can further be claimed, in line with former research (Halldorsson, 2017; Kraus et al., 2010), that the team spirit of the Icelandic players was an important factor which helped the Icelandic team (the weaker team) to secure a favourable result in the match, while the lack of team spirit resulted in a disappointing result for Argentina (the favourites). Finally, it can be claimed that players' agency, especially in terms of directing positive symbolic gestures towards their teammates, is important for raising team spirit and building team momentum in the heat of the on-field action, while on the other hand the absence of such player agency results in less communication and team momentum and in effective team work.

Naturally, findings from a single match do not necessarily hold for other matches of the two teams. In other words, we cannot argue from these findings that they are representative of how the two teams act in general. Many socio-cultural and situational factors may also be at play here (Halldorsson, Thorlindsson and Katovich, 2017; Pescosolido and

Saavedra, 2012). Such factors will need to be taken into consideration when such findings are analysed further.

First, sports are cultural constructs and are played differently from one cultural context to the next (Archetti, 1999; Halldorsson, 2017; Lever, 1983). This shows, for instance, in how teams from different nations play. Argentina and Iceland have different traditions of footballing styles. Archetti (1999, 190) has argued that Argentinian football players demonstrate a romantic notion of playing aesthetically which is based on “technical ability and individualism”—much like Brazilian football players. Researchers have, on the other hand, argued that Icelandic football players tend to favour a disciplined and collective style of playing (Telseth and Halldorsson, 2017). Thus, the individualistic playing styles of the Argentinian and Brazilian players contrasts with the collectively orientated European style of playing football (Archetti, 1999, 190-193; Telseth and Halldorsson, 2017; Wieting, 2015). Argentina has been seen as playing *positive* and attacking football, while Iceland’s style has been described as *negative* and defensive (see Archetti, 1999; Halldorsson, 2017; Telseth and Halldorsson, 2017). Those cultural differences show in the results of the content analysis (see Table 1). Thus, different cultures and playing philosophies can influence how players act on the field.

Second, the difference in the symbolic communication styles of the two teams can also be attributed to the fact that the players are the products of ideologically different sports systems. While most—if not all—of the Argentinian players are professional in the fullest sense of the term and have been schooled in professional football academies all around the world, most of the Icelandic players have their origins in an amateur sport system in Iceland. The amateur ideology of Icelandic sports nurtures different elements of playing sports than is customary in the professional world of elite football. Thus, the Argentinian players are more inclined to adhere to the professional style of the individual elite sport, which Billing, Franzén and Peterson have described as having “dehumanized” sport (2004), while the Icelandic players are more inclined to adhere to a more amateur approach to sport which can be characterized by passion, friendships and seeing sports as play rather than work (see Halldorsson, 2017; Wieting, 2015).

Third, small societies have the advantage over big societies that it is easier for them to build and foster feelings of belongingness and coherence (Benedict, 1967). Katovich and Couch (1992), for instance, have

argued that people who share extended pasts tend to construct more effective team chemistry and feelings of togetherness than those lacking shared pasts (see also Couch, 2017b). For Argentina, with a population of 44 million, it can be a more challenging task to build strong teamwork and team spirit among its players than for a tiny nation like Iceland, with a population of only 340,000, where the players have often known each other since early childhood (see Halldorsson, 2017).

The fourth factor relates to the players' motivation. On one hand the state of the sociocultural wellness of the two nations differs considerably, which could impact the national sentiments of the two teams. While Iceland is an affluent society characterized by a strong sense of national pride and national identity (Halldorsson, 2017; Halldorsson, 2019) Argentina is facing economic⁴ and anomic social problems, which result in social disruption and fractured national identity (Perus, 2003; Quenza, 2009; Tedesco, 2000). Thus, the different sociocultural contexts of the two nations could impact the players sentiments toward playing with each other as well as the levels of sacrifice and the fighting spirit which the players show playing for their nation. On the other hand the match analysed in this paper was Iceland's first match ever at the World Cup finals. The historic significance of the match could have provided the Icelandic team with extra motivation and pride to play for their country, leading to a stronger sense of the importance of the occasion and of doing well for the Icelandic nation. Argentina, on the other hand, is a regular player in the World Cup finals, and most often a contender for the World Cup trophy. Higher expectations and pressures on the Argentinians could more easily lead to frustration and disappointment than for the Icelanders which had less to lose⁵. Thus, the historical significance of this particular match was different for each of the two teams, and this could have influenced their collective sentiments.

Finally, the results from the content analysis reflect how the match itself developed (see Moesch et al., 2015), driven on by what Fine would note as "triggering events" which incite action (2012, 48-49). Argentina were the favourites to win the match while Iceland were in the role of the

⁴See: <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2172rank.html>

⁵See remarks from Argentinian coach Jorge Sampaoli after the tournament: <http://mundoalbiceste.com/2018/10/09/argentina-jorge-sampaoli-world-cup-lionel-messi/>

“underdogs.” Thus, going into the match as the underdogs placed the Icelandic team in a advantageous position, especially when the match started to progress favourably for the Icelanders. The Argentinians were in a position to control the match, keep the ball and go in for a win. The Icelanders, on the other hand, were trying to get something out of the match. They were happy with a draw. Thus, they had more chances to celebrate the “small wins” in the match, i.e. to frame each defence (of not conceding a goal from the famous Argentinian attack led by one of the world’s best players, Lionel Messi) as a win that could be celebrated. The Argentinians were frustrated at not being able to break the Icelandic defence, as shown in the analysis. It can be argued in this context that the Icelanders used more efficient framing (see Goffman, [1974]/1976) of the development of the match than the Argentinians, celebrating their “small wins”, while the Argentinians were frustrated at their failed attempts.

Accordingly, it can also be argued that it is more difficult for players to provide support for their teammates while the team is failing than when the team is achieving (see Pirlo, 2013, 33-34). However, despite the different situations of the two teams in the match, the Argentinian players failed to make the choice to act as a team to try to turn the downward trajectory which the match imposed on them (see Blumer, 1937). Despite many opportunities, after failed attempts, the Argentinian players did not support or encourage each other, which they desperately needed in relation to how the match developed (see Picture 3). In other words, the opportunities which the Argentinians had of supporting and encouraging each other, but left unused, tell the opposite story of those that the Icelanders had of celebrating the “small wins.” In part, this difference lies in individual agency and different team cultures.

Thus, a football match is dynamic in nature. There are triggering events in any sports match which have the potential to turn on the constructive/destructive trajectory of a team in the field of play (positive or negative). Whether, and how, the team responds to these events will depend on the teams’ spirit and the players’ agency. I argue that in healthy teams, players show character, leadership and agency in order to turn on the forces that will help them to pull through adversity, for instance, in contrast to unhealthy teams where players act by themselves, inattentive to such actions. Such team spirit makes a team something more than the mere sum of its parts and in turn more successful.

Conclusion

To conclude, this paper set out to establish a theoretical framework for the analysis of team spirit in sport. More specifically the paper set out to account for how symbolic communication between players on the field of action both characterizes a teams' spirit and also how it builds momentum in the game action, by using a single football match as an example. This particular match, Argentina versus Iceland, is not the main concern of this paper: it only serves as an example of the proposed themes. The topic of the paper is rather how common forms of symbolic communication are utilized for enhancing team spirit during a football match and further how they can be analysed (linking micro with macro-level analysis).

The findings reveal that in this particular match the Icelandic players used symbolic communication, and especially positive gestures, to a greater extent on the field than did the Argentinian players. Thus, one of the main arguments that can be drawn from the findings is that a key factor in why Iceland gained a better result from the game is because the Icelandic team consisted of more productive and emergent team spirit (see Mead, [1934]/2002, 198,329) during the match than did the Argentinian team. The team spirit was exemplified in the Icelandic players' shared use of positive on-the-field symbolic gestures and communication which provided the players with support and encouragement and created recurrent momentum for the Icelandic team in the heat of the game action. By contrast, the Argentinian team lacked such team spirit in the match where the Argentinian players' did not show such player agency; symbolizing the social distance within the team which led to a disappointing result.

Since the topic of symbolic communication in regard to team spirit has not been analysed to any extent in the current literature this paper is considered a starting point, intended to open up a new field of inquiry of taken-for-granted gestures by analysing on-the-field team sport performance. It is neither a holistic account of symbolic communication in football nor a fully developed analysis of the elements noted (team spirit and symbolic communication in sport). For instance this paper first and foremost accounts for the use of physical gestures in a sporting match but does not account for the use of facial or postural expressions to any extent. This paper further does not account for team spirit outside the game action, such as in training, meetings or at social gatherings of the teams'

players. This paper further only analysed one match of the teams and did not account for how those teams act in general. Hopefully, however, the paper has raised important issues for further research along these lines. There are many possible routes for further examination of symbolic communication in sports to follow. Further research into this area should analyse more games, from different nations and cultures, and correlate findings with performance—as shown in winning and losing records—and addresses the influence of the different socio-cultural contexts of teams and situational aspects of sporting contests. Further research should further account for the use of facial and postural expressions in sporting contests. There are some fine recent examples of such analysis by Kraus et al., (2010), Moesch et al. (2015) and Pellicier (2013), and it is to be hoped that more scholars will follow and provide sport practitioners with a more thorough understanding of the role of symbolic communication and on-the-field team spirit in sport.

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Out of the Icelandic cold murder they wrote: The Guðmundur- and Geirfinnur criminal case of 1974¹

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Abstract

The case of Guðmundur and Geirfinnur has become one of the most notorious criminal case in the history of Iceland. Two males disappeared in the mid 1970's and their bodies were never found. A total of six persons were later convicted of murdering the two merely on basis of their confessions. The suspects were held in solitary confinement for a long period of time and subjected to lengthy interrogations even torture. As time passed, cracks started to open up in the court version of the case, slowly starting to crumble. In late September of 2018 the Supreme Court of Iceland acquitted five of the six original suspects.

Key words: Homicide, winter, murder mystery, national hysteria, missing persons

Introduction

During winter in Iceland days can be both dark and cold. In December and January daylight only lasts about 4-5 hours a day and the temperature can get nasty including the wind chill factor. In 1974 two young males disappeared during cold and dark winter nights in January and November. The first one, 18 year old, went missing in January after a visit to a nightclub in Hafnarfjörður on a freezing snowy night. Later in November of the same year, a 32 year old family man went missing late at night in Keflavík close to a local café by the docks. The two did not know each other and were not related in any other way.

¹ Based on a paper presented at a ICO conference (Cold as an Advantage) in Yakutsk, Yakutia in Russia, November 29-December 1, 2018.

About two years later six young individuals from Reykjavík were arrested on suspicion of killing these two young males. They were held in solitary confinement for up to two years the longest and suffered various other punitive measures while in custody before being charged and convicted for killing the two males by the Supreme Court in 1980. They received long prison sentences from 3 years up to 17 years and served their prison terms accordingly. Nothing was shown in court that they had known the two missing males in question neither was there any other convincing motive found for the two killings demonstrated in court – and the bodies were never found. The court decision was only based on their confessions yet later during custody had been retracted by them.

This case has become one of the most notorious criminal cases in Icelandic history and by now is believed by most to be a total fabrication and a serious miscarriage of justice. In late September of 2018 five of the young persons in question were finally acquitted of the two killings by the Supreme Court of Iceland.

In this paper presentation it is contended that this case could never have happened if not for the cold and dark winter hours in Iceland. Under some circumstances extreme weather conditions can in a small tightly knit society at social cross roads create a deep national hysteria resulting in a case nothing short of a modern time witch hunting – reflecting fiction more than reality.

Homicide in Iceland

Murders in Iceland were extremely rare in the 1970's, and even still today not an annual matter (Gunnlaugsson, 2018). There have recently been years in Iceland with zero murders, such as 2008 and 2006. In the new millennium Iceland has experienced on the average of two homicides per year. This rate locates Iceland on the lower end of the spectrum when it comes to murders per capita per year, with 0.6 murders per 100 thousand citizens. There are many nations with a *per capita* murder rate between 0.9 to 1.5, and United States stands out among Western nations with 4.9. In the 1960's and 1970's serious crimes were practically unheard of, apart from a taxi driver being killed in Reykjavík in 1968, a case still being unsolved.

By far most murders in Iceland occur among those who know each other personally. Usually intoxicated, and killing in the heat of the

moment, using knives or bare fists. Rarely planned homicides, and seldom any mysteries. Often those concerned also have a history of prior violence. Does this description of typical homicides in Iceland show any resemblance to the case of the two missing males in question?

Disappearance of Guðmundur Einarsson

In late January of 1974 a young man, 18 years old, by the name of Guðmundur Einarsson, disappeared after he had left a nightclub in Hafnarfjörður, a port town, ten kilometers away from Reykjavik, the capital of Iceland (Adeane, 2018). A few road passengers spotted him after midnight attempting to catch a ride to Reykjavik, apparently very drunk. It was dark, cold, snowy and icy everywhere. Guðmundur has not been found ever since. No credible evidence has been brought forward to what happened to him, despite a thorough search by a great number of people and rescue teams, in the days and weeks following his disappearance.

Photo 1: *Morgunblaðið* newspaper report on the massive search of Guðmundur Einarsson, a couple of days after his disappearance in January of 1974.



Some ten months later, or in November of 1974, another male of 32 years old, a family man and a construction worker in Keflavik disappeared, Geirfinnur Einarsson. His case bore more the hallmarks of a criminal case than the teenager’s case, which in comparison looks more like a tragic accident, less than a year earlier (Adeane, 2018). The two, Guðmundur and

Geirfinnur, did not know each other. They lived in two different towns with significant age difference between the two.

Photo 2: Geirfinnur Einarsson, who disappeared in Keflavík November 19, 1974.



Geirfinnur was at his home at night during mid-week with a male friend watching TV (Adeane, 2018). Soon after his wife returned home from the library, Geirfinnur asked his friend for a lift in his car because he had to meet someone –and had to come alone to the meeting. Better be armed he told his friend who took it as a joke. Geirfinnur did not meet anyone there and returned home at 10:15pm.

Then he got a phone call from someone to which his son answered, and Geirfinnur responded, I already came. Then he paused and said he will come. Grabbed his jacket and pipe and headed for the door. The boy asked his father where he was going without any response and then asked if he could come along but his father refused. Geirfinnur then drove his red Ford Cortina to the café and parked nearby.

Like Guðmundur before, Geirfinnur then just vanished, and has not been found or seen ever since. His car was found close to the café the following morning, unlocked, with the keys in the ignition. The café was located close to the Keflavík docks by the cold Atlantic Ocean.

Photo 3: Location of where Geirfinnur's car was found the day after his disappearance.



The circumstances were strange for Geirfinnur's disappearance and many details known and certainly suspicious. Who was the person who called Geirfinnur? Who was he supposed to meet at the café? The police investigated the case intensely in the weeks and months following his disappearance and scrutinized his personal life. It was almost impossible to find anyone who held any grudge against him, described as being somewhat of a loner, and a private person. Not in any financial difficulty but not with enough means to cause any resentment from anyone. A typical Icelandic family man by all accounts.

Therefore, it is no surprise that the disappearance of Geirfinnur created a huge moral fervor in Iceland, and a massive police investigation, given the suspicious circumstances. Not much came out of the initial investigation by police and no arrests were made in the beginning.

Prosecutions and convictions

After nearly two years after the disappearance of the two males and dozens of possible suspects, six young people around 20 years old were eventually arrested in late 1975 and 1976 and kept in isolation for months (Milne, 2016, Finnsson, 2017 and Cox, 2018). One of them was even kept in solitary confinement for more than 600 days. Some of them had been involved in petty crime and therefore known to the police. Early on some of them confessed to the murders even though they had no clear memory of committing the crimes. One suspect, a young woman, later stated she had confessed to the crime to be able to get back to her then few months child. She also implicated four other persons to the case who consequently

had to sit innocent in solitary confinement for more than 100 days in solitary confinement before being released.

Much later it was revealed that in addition to the psychological stress of the interrogation and isolation, the young suspects had been subjected to sleep deprivation and water torture, particularly the alleged ring leader, who had a fear of water. They all later said that they had signed the confessions to put an end to their solitary confinement.

There was a huge pressure on Icelandic officials to solve the case. A case in point is that Icelandic authorities even hired a retired W-German expert cop to lead the investigation. When he had helped solving the case the Justice Minister of Iceland stated in a newspaper interview in February of 1977 that a nightmare had been lifted off the nation.

The Icelandic Supreme court finally in 1980 sentenced all six suspects to prison for the murder of Guðmundur and Geirfínnur. The only tangible evidence supporting the decision was their confessions. The young convicts served their sentence accordingly and were later released in the 1980's. This notorious criminal case marked all included in the aftermath, understandably making life in a small society difficult for them. Despite efforts of re-opening the case, mostly through the efforts of the alleged ring leader, Sævar Ciesielski, the case was not re-opened until 2018. Two of the suspects had by then passed away, including the ring leader. In September of 2018 all convicts were acquitted expect the woman apparently due to her perjury implicating four innocent men.

Photo 4: Geirfínnur's case has been solved: Three males confess to the murder of Geirfínnur. *Morgunblaðið*, February 3, 1977.



Concluding remarks

The disappearance of the two men in 1974 understandably was suspicious and mysterious. No surprise Icelanders were puzzled and curious what had happened to them. Rumors were spreading in society and many tips appeared from the public. Soon after the disappearance of Geirfinnur in November of 1974 the police was under tremendous pressure of solving the case. They seem to have followed a lead based on nothing but rumors that the young people in question were linked to both cases.

And once the ball started rolling and the young people had been held in solitary confinement for months, with confessions early on, it probably became very difficult for the police to rewind and start the case anew. Most likely police investigators were confident that they had apprehended the guilty ones of the two killings. Even though no bodies were found, no connections between the accused, and the two missing men in question, no credible motives, they were still convicted and sentenced to long prison sentences. Just some young people previously linked to petty crime and two missing persons.

In addition, the two killings were very different to the characteristics of typical homicides in Iceland. Killings in the heat of the moment usually intoxicated among those who know each other well. Nothing of this type was demonstrated in court for this case.

Personally, I remember it vividly when the profile photos of the young people accused of the two killings were published in the local media in the mid-70's (photo 4). I was just a teenager at the time, and I was confident they were guilty. The police snapshots seemed to prove their guilt. The leader also had a foreign name, which only seemed to add more proof to that they were guilty.

In a way, to my young mind, this was like we had our own local Baader Meinhof terrorist group in Iceland, or even some sort of a US Manson family. We were facing a criminal gang with intentions of doing harm to society. When the case dragged on, and the young suspects retracted their confessions during their confinement, it only seemed to prove how hard-headed and ruthless these youngsters really were.

Gradually over the years cracks started to build up that the police version of the story was not correct. The police narrative of what had happened simply could not have happened like they had described, was in fact impossible (Danielsson, 2016). The cars being used in the killing of

Geirfinnur did not match, weather conditions made police scenarios impossible, time table of events was not realistic, links to distil alcohol sale, and a night club were dubious to say the least, to name only a few of the apparent inconsistencies in court records.

Yet, the system showed no signs of giving up, and the Supreme Court denied the case to be reopened in 1998 due to lack of new evidence. Since 1998 pressure on the court system to re-open the case from different groups in society only became more intense. Articles, books and TV programs increasingly revealed more holes or gaps in the official version of the criminal case urging justice authorities to reopen the case.

Today, Icelanders appear to direct the blame for this whole affair not on the young people anymore as was done in the 1970's. Now, the police investigative forces and the court system personnel end up as being the guilty ones having made this whole case up out of next to nothing in the 1970's. It is perfectly understandable to focus on the criminal justice system and its responsibility of what eventually came out of the case. They are the ones formally responsible for the genesis of this huge miscarriage of justice. Still, we need to keep in mind they did not have any experience dealing with complex and difficult cases back in the 1970's, and they did not have the skills and training they have today. And the case of Geirfinnur certainly on the surface appeared to be a serious crime needed to be solved by police.

Even though the criminal case in question originated in the criminal justice system, I still think it is premature only accusing the system for this whole unfortunate affair. The entire society was overwhelmed and gripped by the case in the 1970's fueled by sensational news media reporting. A moral panic and national hysteria can be shown to have dominated the national psyche, with the local mass media regularly feeding us on all the rumors spreading around. Some of the rumors appear to have implicated the young people in question early on. These youths, or some of them, had been linked to petty crime by the police, being labelled and stigmatized by society, as being a group of misfits, linked with both drugs and violence. At a time in history when radical social change was taking place in Iceland. Rapid urbanization, and the outside world increasingly entering Iceland with influx of drugs, among other things (Gunnlaugsson and Galliher, 2000). This criminal case seems to have symbolized new times for Iceland, a tangible evidence the nation was leaving its innocence behind.

On the surface the young suspects seemed to perfectly match the profile of being the guilty ones of the two killings. In turn keeping them in custody for so long created a huge pressure on the police and the court system to solve the case, tragically ending up in a serious mistrial of justice. After years of custody and solitary confinement it must have felt impossible for the system to let the young just walk out innocent, due to lack of evidence. And the confessions made early on by the suspects, later revealed under tremendous pressure, did not help the suspects when the court proceedings took place.

In late September of 2018, five of the six convicts were finally acquitted by the Supreme Court. This was an historic move by the Supreme Court overturning an earlier ruling. However, one of the convicts had been left out by the special prosecutor assigned to re-evaluate the case. The only woman in the case was not acquitted, because of her alleged perjury against innocent men implicated to the case by her, during her custody confinement in the 1970's. This part of the whole case and mistrial of justice has therefore not yet come to an end.

In 2018, we are in fact in the same position as when the two young males disappeared in the mid-1970's. We do not know anything more now what happened to them than in the beginning. No credible or convincing evidence shows any links to the young people sentenced to long prison terms for the two killings – nor to anyone else for that matter.

In my mind, Geirfinnu most likely just walked out into the cold ocean to end his life. Reportedly his marriage was nearing an end (Antonsson, 1991). Walking out like this might have been his response out. As for the teenager, Guðmundur, he most likely died in an accident, probably close to the harbor with his body vanishing into the ocean. Yet the case of the missing two persons remains a complete mystery in Iceland today. Probably we will never know what really happened back in 1974.

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Reports

Colloque international multidisciplinaire

L'avantage du froid

Холод как преимущество

Cold as an advantage



The Republic of Sakha (also called Yakutiá, in Russian: Республика Саха, Respublika Sakha, or Якутия, Yakoutiia, in Yakut: Саха Өрөспүүбүлүкэтэ, Sakha Öröspübülükete) is located in northeastern Siberia. Yakutsk, its capital, is known as the coldest city in the world. Entirely built on permafrost, it has more than 300,000 inhabitants. In addition to the North-East Federal University (16,000 students), which specializes in permafrost, there is the Institute of Human Sciences and Northern Indigenous Studies, the Siberian branch of the Russian Academy of Sciences. Following the conference, will be held the Yakutia Winter Festival. The Université du Québec à Montréal collaborates with Yakut researchers on the issues of northern cultural representation and on the development of indigenous cultures, including the Yakut culture.

At the North-Eastern Federal University M.K.Ammosov
in Yakoutsk (Sakha Republic, Russia)

From November 30th to December 1st, 2018

In collaboration with

The International Circumpolar Observatory — Arctic and
Antarctic
(E. del Acebo Ibáñez & Daniel Chartier)

The Laboratory of the Complex Geocultural Study of the Arctic

The International Laboratory for the Multidisciplinary Study of
Representations of the North at the
Université du Québec à Montréal

and the UArctic thematic network “World Images of Indigenous Peoples of the North”

Cities and permafrost: traditions, innovations, and creativities

The urban spaces of the northern territories as an innovative resource for the development of the region are an important direction in the strategy of sustainable development of the Arctic and the North. The modern city is a dynamic process of continuous production of new images and new cultural “texts” of imagination of its geo-cultural images. The feature of the northern cities (including those of Yakutia) is a life strategy, conditioned by the cold and the permafrost. Today in modern science the permafrost is considered not only as a natural phenomenon, largely determining the conditions, culture and lifestyle in the cold region, but also as a metaphor for all the hyperprocesses and hyperphenomena that are determinative and crucial for human existence.

The location of this conference, Yakutia, is a region in which everyone feels a part of a hyper phenomenon, that is, inaccessible to human forces and understanding. The creative resource of the urban environment is associated with the creative potential and creative code of ethnic culture.

The creative strategy, conditioned by permafrost - cold as an advantage - dictates new principles for shaping the urban landscape (urban concept of light and ethnic design). A model is being developed for constructing a new positive trajectory of northern identity that represents the creative resources of territorial / regional / geo-cultural identities. A comprehensive study of cities located in the permafrost zone is of specific scientific interest because it could help to solve not only some fundamental problems of the city life sustenance in extreme conditions, but also a wide range of humanitarian problems connected with conceptualization, adaptation, cultural experience of life in “permafrost zone”.

The focus of this conference is the representation of the cultural landscapes of the Arctic's urban spaces in the context of humanitarian and geographical urbanistic and symbolic creative technologies, the study of local urban communities and the development of a model of a new type of northern identity in Russian Arctic, but also in all the circumpolar Arctic.

In the conference it is planned to discuss the following themes:

1. Modern urban space on extremely cold lands (adaptation, practices, representations)
2. Cultural space of the city (tradition, innovation, creativity)
3. Cold as opportunity (traditional knowledge and practices, high technologies, design, architecture, tourism promotion)
4. Cold in art and literature, languages, concepts, world view, etc.
5. Social, environmental and economic challenges of cold cities.

Please submit your proposal before September 30th, 2018 with a title, brief description, your professional of cultural affiliation and status, postal and email addresses both to Liudmila Zamorshchikova lszam@mail.ru and Daniel Chartier imaginairedunord@uqam.ca. Proposals should be written in English, French, or Russian. Answers will be sent by October 15th, 2018.

Call for papers

International Multidisciplinary Conference Cold as an advantage Холод как преимущество L'avantage du froid Photographies Imaginaire | Nord + Robert Fréchette The Republic of Sakha (also called Yakutia or Yakutia, in Russian: Республика Саха, Respublika Sakha, or Якутия, Yakoutiia, in Yakut: Саха Өрөспүүбүлүкэтэ, Sakha Öröspübülükete) is located in northeastern Siberia. Yakutsk, its capital, is known as the coldest city in the world. Entirely built on permafrost, it has more than 300,000 inhabitants. In addition to the North-East Federal University (16,000 students), which specializes in permafrost, there is the Institute of Human Sciences and Northern Indigenous Studies, the Siberian branch of the Russian Academy of Sciences. Following the conference, will be held the Yakutia Winter Festival. The Université du Québec à Montréal collaborates with Yakut researchers on the issues of northern cultural representation and on the development of indigenous cultures, including the Yakut culture. At the North-Eastern Federal University M.K.Ammosov in Yakoutsk (Sakha Republic, Russia) From November 30th to December 1st, 2018 In collaboration with The International Circumpolar Observatory — Arctic and Antarctic The Laboratory of the Complex Geocultural Study of the Arctic The International Laboratory for the Multidisciplinary Study of Representations of the North at the Université du Québec à Montréal and the UArctic thematic network “World Images of Indigenous Peoples of

the North” Cities and permafrost: traditions, innovations, and creativities
The urban spaces of the northern territories as an innovative resource for the development of the region are an important direction in the strategy of sustainable development of the Arctic and the North. The modern city is a dynamic process of continuous production of new images and new cultural "texts" of imagination of its geocultural images. The feature of the northern cities (including those of Yakutia) is a life strategy, conditioned by the cold and the permafrost. Today in modern science the permafrost is considered not only as a natural phenomenon, largely determining the conditions, culture and lifestyle in the cold region, but also as a metaphor for all the hyper-processes and hyper-phenomena that are determinative and crucial for human existence. The location of this conference, Yakutia, is a region in which everyone feels a part of a hyper phenomenon, that is, inaccessible to human forces and understanding. The creative resource of the urban environment is associated with the creative potential and creative code of ethnic culture. The creative strategy, conditioned by permafrost - cold as an advantage - dictates new principles for shaping the urban landscape (urban concept of light and ethnic design). A model is being developed for constructing a new positive trajectory of northern identity that represents the creative resources of territorial / regional / geo-cultural identities. A comprehensive study of cities located in the permafrost zone is of specific scientific interest because it could help to solve not only some fundamental problems of the city life sustenance in extreme conditions, but also a wide range of humanitarian problems connected with conceptualization, adaptation, cultural experience of life in "permafrost zone". The focus of this conference is the representation of the cultural landscapes of the Arctic's urban spaces in the context of humanitarian and geographical urbanistic and symbolic creative technologies, the study of local urban communities and the development of a model of a new type of northern identity in Russian Arctic, but also in all the circumpolar Arctic.

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5. Social, environmental and economic challenges of cold cities.

Institutional information

International Association of Circumpolar Sociocultural Issues (IACSI)

What is the IACSI?

IACSI is an international scientific association devoted to the study of different socio-cultural aspects related to the Arctic and Antarctic regions. The Association is integrated mainly by scholars from Social Sciences, Anthropology and Humanities, and also from individuals with different backgrounds but interested in these perspectives and themes. As a new association which looks for integration and cooperation, we are also looking for new members in both circumpolar regions.

What are we after?

Assuming the importance that the socio-cultural approach has for a holistic understanding of the circumpolar phenomenon, we have also considered the need to study the "circumpolar theme" in its bi-polar dimension: the Arctic and the Antarctica, in order to look for convergences and divergences under the debates "local/global", "North/South", "development/sustainability", and also looking for the production and transference of knowledge. In this sense, we privilege scientific investigation with reference to:

- Local Communities in Extreme Environments
- Social Problems and Human Well-being
- Participation and Community Attachment
- Habitat and Identity
- Minorities and Native people
- Migration
- Environment and Sustainable Development

What do we do?

- Generate scientific and academic projects bound up with circumpolar socio-cultural issues.
 - Organize once a year an international seminar on the circumpolar socio-cultural issues.
 - Organize cultural events, such as Films and Documentary Festivals related to these issues.
 - Support academically the "Arctic & Antarctic International Journal of Circumpolar Socio-cultural Issues", published annually.
 - Encourage relationships and academic collaboration between Universities and Research Centres sited in one or both circumpolar regions.
 - Promote international workshops, seminars, and conferences.
- Contribute and award prizes to investigations, and activities concerning to solve problems in one or both circumpolar regions.
- Establish nets with national and international institutions, associations and NGOs linked to the matters which are the interest of the IACSI.

According to the aims of the International Association, were organized different scientific meetings where papers from different countries and regions were submitted:

- a) In April 26th, 2005, was run the ***1st International Workshop on Circumpolar Socio-Cultural Issues***, at the University of Jyväskylä (Finland), organized by the Department of Social Sciences and Philosophy of this University and the IACSI.
- b) In April 7th, 2006, was run the ***2nd International Workshop on Circumpolar Socio-cultural Issues***, at the University of Iceland, organized by the Faculty of Social Sciences of this University, the Icelandic Sociological Association, and the IACSI.
- c) On November 30, 2007, was run the ***3rd International Workshop on Circumpolar Socio-cultural Issues***, at the University of Oulu (Finland), organized by the Thule Institute of this University and the IACSI.
- d) On November 16-18, 2010, was run the ***I International Meeting on Northern and Southern Circumpolarities: Socio-economic and Socio-cultural Approaches***, under the auspices of the CICLOP, School of Economics, University of Buenos Aires and the International Center for the Patrimony and Heritage (CICOP).

e) On September 25-26, 2014, was run the **4th International Workshop on Circumpolar Sociocultural Issues** at the University of Iceland, organized by the Faculty of Social and Human Sciences of the University of Iceland and the International Program on Circumpolarity, Antartica and Extreme Environments (PIECA, Faculty of Social Sciences, Universidad del Salvador), and under the auspices of the IACSI. During the 4th Int'l Workshop one session will include oral presentations while the other one will be devoted to the screening and discussion of documentary and experimental films from both northern and southern circumpolarities. This second session will receive collaboration from the Reykjavík International Film Festival (RIFF).

The IACSI has also organized four Circumpolar Film Festivals, such as: one devoted to the Icelandic cinema (Universidad del Salvador, Buenos Aires, 2005), another devoted to Argentine cinema (University of Iceland, Reykjavík, 2007), a third one devoted to Northern and Southern Circumpolarity (University of Buenos Aires, Buenos Aires, 2010), and a fourth one -under the auspices of the RIFF (Reykjavík International Film Festival) devoted to fiction and documentary films related to circumpolar sociocultural and anthropological issues (University of Iceland, Reykjavík, 2014).

Membership

The members can be individuals or institutions. Individual membership: € 30 (thirty Euros), including one copy of the annual issue of "*Arctic & Antarctic...*". Institutional membership: € 100 (one hundred Euros), including two (2) copies of the annual issue of "A&A-IJCSCI". In order to apply membership, take contact to the chairperson nearest to your geographical location and pay the membership fee to the bank account mentioned in the very same context.

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Universidad del Salvador (Argentina)

Founded in 1956, is the first private university in Argentina, and one of the largest in the country. It has different locations, namely: headquarters in the city of Buenos Aires, in Pilar and Mercedes (province of Buenos Aires), and Virasoro (province of Corrientes).

The main objectives of the Universidad del Salvador are: a) to emphasize academic excellence, b) to value diversity and pluralism, c) to form competent professionals and researchers with a critical judgement, d) to promote the development of knowledge through teaching and research, e) to impact the society as a whole not only through the theoretical analysis of the problems but also providing the possible solutions, f) to foster the internationalization of the students and staff.

The Universidad del Salvador has international joint programs in both undergraduate and graduate levels. It has different Faculties, namely: Administration Sciences; Economic Sciences; Education and Social Communication Sciences; Law; Social Sciences; Philosophy, History and Literature; Medicine; Psychology and Psycho-pedagogy; Science and Technology. The University also includes the Graduate Schools of Agronomy, Veterinary Medicine, and Food Technology, and the Schools of Theatre & Arts and of Oriental Studies.

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Faculty of Social Sciences

Dr Mariana Colotta, Dean

The Faculty of Social Sciences includes graduate and postgraduate studies on Sociology, Political Science, International Relations and Social Service.

The *Institute of Research on Social Sciences (IDICSO)* is a unit of the Faculty that promotes interaction between different disciplines, carries out high quality research in the field of Social Sciences and publishes *Miríada*, a peer-reviewed journal on Social Sciences.

Under this University framework, the *International Program of Studies on Circumpolarity, Antarctica and Extreme Environments (PIECA)*

–directed by Dr Enrique del Acebo Ibáñez– develops comparative studies and research between the Northern and Southern circumpolarities, some of them in collaboration with different researchers and scientists from Northern and Arctic universities (Iceland, Finland, Canada, etc.), and publishes the *Arctic & Antarctic – International Journal on Circumpolar Sociocultural Issues*, a peer-reviewed publication, together with the Foundation of High Studies on Antarctica & Extreme Environments (FAE) and the Faculty of Social Sciences of the University of Iceland

University of Iceland (Reykjavík, Iceland)

The University of Iceland was established in 1911. The university is organized into 5 academic schools, and 25 faculties. The university offers diverse program on all levels. The University of Iceland is the only university in Iceland offering undergraduate and graduate studies in all the main disciplines. In addition, the University of Iceland is an internationally renowned research university and our academics have received a great deal of international recognition for their scientific work.

The University operates around 40 research institutes, and research-based graduate studies are also offered. The number of students is currently around 15,000. Most academic disciplines are pursued, closely linked with the professional sector and Icelandic society in general. The university employs a group of well-educated and experienced teachers and scientists; it has a standing tradition for research and collaborates actively with universities and institutions abroad. The University is at once a national scientific and educational institution and a part of the international academic community. Year after year surveys have shown that the Icelandic people have more confidence in the University of Iceland than any other institution; the university enjoys the confidence of more than 90% of the Nation.

School of Social Sciences

The School of Social Sciences at the University of Iceland is the largest and most robust institution of its kind in Iceland. The Faculty has been a leader in educating managers and experts in the field of social sciences and research in these fields in Iceland for over three decades. The Faculty's role is to increase and impart exemplary and internationally recognized knowledge in the field of social sciences through scientific research, teaching and services to the Icelandic labour market. The School has been a leader in this field from its establishment in 1976.

The School is divided into six departments: Faculty of Business Administration, Faculty of Economics, Faculty of Law, Faculty of Political Science, Faculty of Sociology, Anthropology and Folkloristics and Faculty of Social Work.

Faculty of Humanities

Faculty of Humanities has a lot to offer both exchange and regular international students. One of the main attractions for international students is the studies that are unique to Iceland. Examples of those are Icelandic Studies for International students and Medieval Icelandic Studies.

Department of Languages, Literatures and Linguistics

The Faculty offers diverse academic programs in Asian studies, Nordic languages, the major European and American languages in addition to classical languages. Programs covering the following subjects are offered:

- Asian studies: Japanese and Chinese
- Nordic languages: Danish, Finnish, Norwegian and Swedish
- Major European and American languages: English, French, German, Italian, Russian and Spanish
- Classical languages: Greek and Latin (a key to European culture from the beginning)

Programa de Español

Spanish and Hispanic Studies have been taught at the University of Iceland since the early nineteen-eighties. The instruction takes place in Spanish, the study program is demanding, and students are required to acquire excellence in academic work methods. Students are expected to have completed a matriculation exam from an Icelandic secondary school (or its equivalent), have completed two years of Spanish as a foreign language, and/or be near to fluent speakers of Spanish when entering the program.

First year students refresh their knowledge of the language and exercise writing and reading skills in Spanish. Simultaneously they survey the cultural and political history of Spain and Latin America and are introduced to the study of literature. During the second and third years, students enhance their fluency and knowledge of literary history and theory, literature and cinema, as well as linguistics, language history and translation.

The study of Spanish can be combined with other program within (and/or outside) the School of Humanities. After a B.A.-degree has been

obtained, the postgraduate degrees of M.A. and M.Paed are now on offer in the Faculty of Foreign Languages. An M.Paed degree grants a qualification for the teaching of a foreign language within the Icelandic secondary school system, while an M.A. degree is aimed to further the student's knowledge within the field of language and literature, as well as in other fields of Hispanic and Latin American Studies.

The Department of Spanish at the University of Iceland collaborates with a number of Universities in different countries of Latin America and in Spain. Students are urged to complete a semester or a year of their study abroad, to further merge themselves into a Spanish-speaking cultural environment. A good knowledge of foreign languages has proven to serve many fruitful practical purposes and a proficiency in foreign languages becomes ever more valuable on the international scene. Knowledge of Spanish can serve as a passport into an ever more international job market in the field of tourism, business, mass media, politics, teaching and science, as well as for diplomatic posts.

Furthermore, an excellent knowledge of a foreign language opens many opportunities within the fields of translation, interpretation and cultural communication.

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For comments and/or questions about the University of Iceland web site please contact: webmaster@hi.is

Imaginaire du Nord
**The International Laboratory for the
Comparative Multidisciplinary Study
of Representations of the North.
University of Québec in Montréal (Canada)**

The *Laboratoire International d'étude multidisciplinaire comparée des représentations du Nord* is a centre for research, documentation, publication and expertise on the Nordic and Winter imaginary in literature, film, the visual arts and popular culture. It is intended primarily to encourage comparison of the different Nordic cultures as exemplified by Québec, the Inuit community, Scandinavia (Iceland, Norway, Denmark and Sweden) and Finland. The Laboratory was founded by Daniel Chartier and is directed by him.

The Laboratoire has led to the creation of an open, multidisciplinary research network, based on a decentralized yet collective work plan and supported by advanced information technologies. The research objectives of the Laboratory are three-fold:

(a) To study Québec literature and culture from a northern perspective by examining the aesthetic use of the North as a component and the underlying issues, while bearing in mind a more general and dialectic objective, which is the establishing of the parameters for a definition of northern culture.

(b) To carry out a comparative study of the different literary and cultural forms produced by Québec, the Inuit community, Sweden, Norway, Iceland, Denmark, Greenland, English Canada and Finland.

(c) To determine how representations of the North operate and are received both diachronically and synchronically: how the North, from the myth of Thule to popular representations in the visual arts and film today, constitutes an aesthetic and discursive system that maintains constant tension between the representation of the real and the creation of an imaginary world.

Research and Projects

Since it was set up in 2003, the Laboratory has brought together some 15 researchers from about 10 universities (in Québec, Sweden, Denmark, Iceland, France, Israel, Canada, Germany, England, Iceland and

Spain) who have used the infrastructure developed at UQAM to study the Nordic imaginary. The Laboratory is a research infrastructure that brings together, in a free and open manner, researchers interested in studying the Nordic and Winter imaginary. In addition to projects directed by associated researchers and dissemination activities, a number of funded research projects are being carried out at the Laboratory on the theory of the imaginary and representations, cultural and literary history, comparative studies, as well as popular and media-based culture.

Teaching

Students may enroll in a research group in the Laboratory. Research groups receive credit in the M.A. and Ph.D. programs of the Département d'études littéraires at the Université du Québec à Montréal. A B.A.-level seminar is offered periodically. Depending on the semester, individual and group work may involve establishing the corpus and analyzing literature and film; it may take the form of a student symposium.

About 10 students from different universities work at the Laboratory as paid research assistants. Graduate students are welcome to participate in the Laboratory's research activities. All activities are part of a universal framework in which students contribute as researchers.

Lecturers are invited by the Laboratory to come and speak. Postdoctoral researchers also participate in the Laboratory's activities.

Documentary Collection

The Laboratory has one of the largest specialized libraries on the Nordic imaginary and the issues related to its study. Its documentary collection includes 6,000 literary works, essays, films and articles.

Its researchers have developed an innovative series of data banks (containing works, illustrations and quotations) which are continually updated. As of May 1st, 2007, these banks contained some 35,000 records, including:

- An annotated bibliography of more than 6,000 literary works with a Nordic component written by the Inuit community or in Québec, Finland and Scandinavia.
- An annotated bibliography of more than 8,000 studies on the Nordic imaginary and Nordic cultural issues
- An annotated filmography of more than 1,000 films

- A bank of more than 11,000 citations related to the Nordic imaginary, classified according to elements, figures, constructs and themes
- A bank of more than 8,000 illustrations of a Nordic nature, described and annotated.

Since the banks are interconnected, they can be queried by means of multiple criteria and key words; these criteria enable users to link thousands of representations of the North derived from literature, the visual arts, popular culture and film.

To perform its work, the Laboratory has premises equipped with 12 computers, 2 servers and a variety of video, photographic, digitization and viewing equipment. All researchers are welcome to use the Laboratory's resources. Access to the collections and data banks is based on the principle of collective and reciprocal contribution.

Publications

The Laboratory disseminates works on the Nordic imaginary through its own print series and other publications.

The "*Jardin de givre*" series reissues significant, out-of-print works on the Québec and circumpolar imaginary for research and education purposes.

The "*Droit au pôle*" series disseminates literary and cultural studies and analyses that enable readers to understand and interpret the Nordic imaginary.

The works published by the Laboratory are distributed by Presses Universitaires du Québec (www.puq.ca). To contact the Laboratory, please refer to its website: www.imaginairedunord.uqam.ca, or email: imaginairedunord@uqam.ca

The University of Oulu (Finland)

The University of Oulu in Finland was founded in 1958. It is one of the largest universities in Finland with an exceptionally wide scientific base. There are 17 000 students and 3 000 employees at the University and

research is done in more than 70 fields of science in six faculties. The faculties are humanities, education, science, medicine, economics and business, and technology.

In 2008, 1932 Master's and Bachelor degrees and 123 Doctoral degrees were taken. Scientific publications numbered 2238. 84 invention disclosures and 3 patent applications were realized.

There are three research focus areas at the university:

- Information Technology and Wireless Communications
- Biotechnology and Molecular Medicine
- Northern and Environmental Issues

In addition, new initiatives are advanced steel research, international business, and geo- and mining engineering.

The Thule Institute

The Thule Institute is a unit of the University of Oulu that promotes interaction between different disciplines and carries out high quality research in the field of Northern and Environmental Issues, one of the University's focus areas. Thule Institute's activities focus around research programmes, graduate schools and Master's programmes. The Institute also operates in national and international networks in the field of Northern and Environmental Issues.

The research programmes are titled Global Change in the North, Northern Land Use and Land Cover, and Circumpolar Health and Wellbeing. Research is also done in the fields of Environmental and Resource Economics, Environmental Technology and in the programme Human-Environment Relations in the North - resource development, climate change and resilience. The research programmes include academic education and research training. In 2008, the number of staff working at the Institute was 38 and the number of researchers, PhD students and graduate students working on research projects supported by the Institute was approx. 210.

For more information:

<http://www oulu.fi/english/>

<http://thule oulu.fi/englanti/index.html>

University of Jyväskylä (Finland)

Master's and Doctoral Programme in Cultural Policy

The Master's Degree Program in Cultural Policy is a social science based study program, connected to many disciplines via teaching and research both in Finland and abroad. The key areas of education are:

- Actors, instruments and impacts
- Access and participation
- Cultural economy and creative industries
- Cultural diversity and citizenship
- Relationship between art and technology
- Geography and cultural policy

The multidisciplinary master's and doctoral programs in cultural policy develop students' preparedness to:

- analyze the historical development and future of cultural policy in various geographical and sectoral contexts
- compare and explore international and national systems of cultural policy and questions of cultural economy
- evaluate the position of culture and cultural policy in societal transformation processes in public, private and third sectors
- critically apply theoretical, methodological and empirical know-how in working creatively in internationalizing branches of culture

The program is aimed both at Finnish and international students with a bachelor's degree (majoring in social policy, political science, sociology, philosophy, art history, art education, literature, music science, ethnology or history), offering them the opportunity to complete a master's degree. It is possible to continue from the master's program into the Doctoral Program in Cultural Policy. As a unit, Cultural Policy collaborates with the Foundation for Cultural Policy Research CUPORE.

The Doctoral Program in Cultural Policy leads to a Doctorate (PhD) in Social Sciences. The program collaborates with the Finnish Doctoral Program in Social Sciences (SOVAKO). Research and teaching within the master's program are part of the multidisciplinary "Centre for Research on Multicultural Issues and Interaction", and the program participates in the U40 capacity building program 'Cultural Diversity 2030', organized by the

German Commission for UNESCO. In addition, the unit of Cultural Policy coordinated the organization of the 6th International Conference on Cultural Policy Research (2010) and the 4th Nordic Conference on Cultural Policy Research (2009).

For more information check our website:

<http://www.jyu.fi/ytk/laitokset/yfi/oppiaineet/kup/en>

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Foundation for High Studies on Antarctica & Extreme Environments (FAE, Argentina)

The Foundation for High Studies on Antarctica and Extreme Environments (FAE) is an NGO devoted to know and divulge everything about local community problems in extreme environments as well as Antarctic and circumpolar matters in a broad sense. This task is carried out through an holistic approach – a process of integration that includes a great variety of combined factors: social, cultural, territorial, psychological, economic and environmental ones.

The notion of extreme environment is considered from a point of view which tries to go beyond an ethnocentric notion of “extreme”, namely:

a) Environments with “determining geographic factors” which turn difficult the community life and human settlement, although these native populations develop significant socio-cultural adaptations.

b) Environments with “determining social economic factors” which in some cases lead big population sectors further the “resilience

phenomena” (survival in spite of serious determining effects) that could happen responding to the demands of the moment or structurally.

Every environmental issue is considered inside “local/ global”, natural/ built-up” and “sustainable /non sustainable” dialectic. For this reason the Foundation attaches great importance to environmental assessment and socioeconomic impact of any human undertaking either local, national or regional.

Teamed up by a body of professionals and scientists from different areas with broad experience on sociological, psycho-sociological, educational, anthropological, and environmental issues, the Foundation tries to find production and transference of knowledge with reference to Extreme Environments in general terms and Circumpolar Regions in particular ones, by means of:

a) Scientific Research and transference of the results to public and private institutions either national or international with reference to: Natural and Built-up Environment, Local communities, Social Problems, and Sustainable Development.

b) Drawing up educational & cultural programs for the different levels emphasizing the use of multimedia distance education modality.

Main activities

a) Generate academic- scientific projects bound up with extreme environments, either natural or built-up as well as convergences and divergences between different circumpolar regions.

b) Publish books and Journals about issues bound to the subjects the Foundation deal with.

c) Design, develop and assess seminars, intensive academic programs, tertiary and university syllabus for presential and distant education modalities.

d) Design general policies in areas the Foundation is interested in, both in the academic/scientific and the cultural/artistic themes.

e) Carry out environmental impact assessment on socio-cultural and socio-economic undertakings.

f) Promote national and international workshops and/or scientific conferences.

g) Contribute and award prizes to investigations, and activities concerning to solve problems taken into account by the objectives of the Foundation.

h) Tend to establish nets with national, foreign and international institutions and NGOs linked to matters which are the interest and purpose of the Foundation.

Contact

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Arctic Centre University of Lapland (Rovaniemi, Finland)

The Arctic Centre is Finland's national research institute and science centre for Arctic expertise. It is based at the University of Lapland, the northernmost University in Finland and the EU. The Arctic Centre is also an international, multidisciplinary and multicultural institute of top quality research, and it provides science centre exhibitions and science communication. The Arktis Graduate School of the Arctic Centre leads the international Barents Arctic Network of Graduate Schools. The Arctic Centre provides an undergraduate multidisciplinary Arctic Studies Program (ASP) that includes Arctic Governance and Arctic Indigenous Studies programmes.

Multidisciplinary research is currently implemented by three research groups:

The *Sustainable Development* group draws on perspectives from the social sciences in order to address international environmental politics, human dimension of climate change, community adaptation and vulnerability to climatic and social changes, social impact assessment. The research focuses also on indigenous and local knowledge, indigenous and non-indigenous identities, concept of the North in politics, economics and culture, mobility and viability in industrial northern communities. The group participates in three IPY pan-Arctic research initiatives: DAMOCLES (Developing Arctic Modelling and Observing Capabilities for Long-term Environmental Studies), BOREAS – MOVE, and CAVIAR (Community Adaptation and Vulnerability in Arctic Regions).

The *Global Change* group encompasses the biological and physical sciences, with emphasis on applied socio-ecological and geographical studies. It addresses the impacts of land use, the use of renewable and non-renewable natural resources, tourism, long and short-term climate change, and UV radiation. Special emphasis is placed on the cumulative impacts of resource and industrial development and related infrastructure. An international glaciology group specialises in climate change and modelling its impacts on Arctic and Antarctic ice masses, extreme events and global sea level (IPY project KINNVIKA, Change and Variability of the Arctic Systems).

The *Environmental and Minority Law* group focuses on legal issues, such as international environmental treaties on Arctic conditions, regulations and the implementation of environmental, social and strategic impact assessments, the environmental rights of Arctic indigenous peoples and indigenous peoples' participation in environmental management. NIEM (The Northern Institute for Environmental and Minority Law) as a unit of the Arctic Centre has human rights and environmental law as its two focus areas of law from the Arctic perspective.

University of Greenland (*Ilisimatusarfik*)



Ilisimatusarfik is situated in the small but bustling capital city of Nuuk.

Ilisimatusarfik educates for both the private and public labour market, and does research and programmes within humanities, social sciences and health science.

Ilisimatusarfik highly prioritises cooperation with the outside world, locally as well as internationally. *Ilisimatusarfik* wishes to bridge the university world with the business community and the public sector, because with collaboration between the sectors, everyone is contributing strong professionalism and combining new thinking and innovation in a fruitful system.

Ilisimatusarfik is an Arctic university that creates knowledge and innovation in a region developing rapidly. Broadly, deeply and across: *Ilisimatusarfik* is shaping the Arctic through research, education and cooperation.

Ilisimatusarfik has four institutes:

- *Institute of Culture, Language and History*
- *Institute of Social Science, Economics and Journalism*
- *Institute of Learning*
- *Institute of Nursing and Health Science*

Institute of Culture, Language and History:

Theology: How did Christianity emerge and how has it developed through the ages, and what is its role in modern Greenlandic society? Those are some of the questions that the Theology degree programme engages in. As a theology student, you will learn about the origins of Christianity, its history and contemporary issues. Thereby you will be able to independently and qualitatively decide your attitude to, and work with, the Christian religious tradition in relation to the contemporary situation.

Culture and Social History: The Culture and Social History degree is available as a Master degree. The degree provides a broad and versatile historic understanding of cultural and social conditions focused on the arctic world.

Language, Literature & Media: Language, Literature & Media is a university graduate programme. Some of the initial telling things about a country's cultural peculiarities are the spoken language, news, debate and cultural media, and, finally, the literature that mirrors or challenges the national identity. You are at the centre of cultural life when you are studying Language, Literature & Media.

Translation & Interpreting: Professional Bachelor in translation and interpreting is a relatively new professionally targeted Bachelor degree at Ilisimatusarfik. Translators are not only necessary for Greenlandic language and culture to be able to survive in a globalised world, but also serve to improve the public service level.

Institute of Social Science, Economics and Journalism:

Social Science: The degree programme in Social Science provides thorough knowledge about Greenlandic and international social conditions. The programme is broadly based and covers important subject areas within social science, such as political science, sociology, economy and law. With knowledge about these subject areas, you will be able to form an overview of the tasks facing a public administration, for example.

Business Economy: The Bachelor degree in Business Economy is a three-year degree that is targeted towards making students ready to work as business economy specialists in a public or private company, or as generalists looking holistically at business operations and scope for development. The degree programme is developed in close cooperation with Greenland's business community.

Social Work: The Social Work degree is a broad, professionally targeted degree programme within social science. The programme comprises four subject areas: social work, social science, psychology and law. The aim of the degree is to educate social workers who are able to prevent and remedy social issues in today's society.

Journalism: The journalism degree is a professionally targeted degree in a profession that carries many privileges and a great responsibility. It takes courage, cooperative skills and discipline to be a journalism student. This is true both during the programme and work placement and as a fully qualified Bachelor in Journalism.

Institute of Learning:

Teacher: The Teacher degree is a professionally targeted Bachelor degree. The purpose is to train teachers for the Greenlandic “folkeskole” (public primary and lower secondary school) and as a basis for other teaching. At the same time, the degree is a qualification for further education at graduate and Master programme level.

Institute of Nursing and Health Science:

Nurse: A professional Bachelor degree as a nurse provides you with many opportunities. People’s perception of a nurse is typically someone working in a hospital, but that is a too narrow perception. Trained nurses also work with information about general health, teaching and many other things. What these many jobs available for trained nurses have in common is that, as a nurse, your main task is to secure the best possible health for the population. ’

Ilisimatusarfik: From Inuit Institute to Arctic University

1974: GrønlandsLandsråd/The Greenlandic Council proposes the creation of a university-like institution - an Inuit Institute.

1981 The decision is made at the local parliament, the “Landsting”, in autumn 1981.

1983 Professor Robert Petersen is hired as head. Other staff is hired during summer.

1984 The first students at Ilisimatusarfik are taken in for study start in the spring.

1987 Master programmes are introduced. The three-year Theology programme is merged with Ilisimatusarfik/Inuit Institute. The name is changed to Ilisimatusarfik (University of Greenland). The celebration of the opening of own buildings in the newly restored mission station, NyHerrnhut, takes places 10 September 1987.

1989 The statute for the university is passed. With this, Ilisimatusarfik has formal status as a university. The date for the foundation of Ilisimatusarfik as a university is 1 September 1989.

1995 The Bachelor programme is introduced.

1996 A new statute is passed in Parliament.

1997 The Bachelor programme in Theology is introduced.

2003-2005 A separate programme in Theology, ”exam theol”, followed by pastoral college, is introduced.

2007 A new statute is passed in the parliament after which the university is merged with other institutions for further education, and a new structure with board and rector is introduced. The law comes into force 1 January 2008.

2008 Ilisimatusarfik is moving to new premises in the newly built Ilimmarfik. Ilisimatusarfik now comprises nine institutes. The board is appointed.

2009 Tine Pars is hired as new rector 1 January 2009.

2010 A new institute structure with three institutes is introduced: The Ilimmarfik Institute of Learning Institute of Nursing and Health Science

2015 A new institute structure with four institutes is introduced: Institute of Learning Institute of Nursing and Health Science Institute of Social Science, Economy and Journalism Institute of Culture, Institute of Nursing and Health Science

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The University of the Faroe Islands

The University of the Faroe Islands is an autonomous educational and research institution which overall purpose is to strengthen the scientific expertise at the University and in the Faroese community in general.

The University has two Faculties: Faculty of Humanities, Social Sciences and Education, and Faculty of Natural and Health Sciences, and six Departments: Language and Literature, History and Social Sciences, Science and Technology, Education, Nursing, Research Center for Social Development.

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Université de Versailles Saint-Quentin-en-Yvelines (UVSQ), France

Founded in the early 1990s, the University of Versailles Saint-Quentin-en-Yvelines (UVSQ) is now the largest institution for higher education, research and technology in the administrative district of Yvelines, west of Paris.

UVSQ spans five campuses. It has a student body of approx. 17,000 enrolled in over 200 programs in all major scientific domains: Faculty of Science in Versailles, Faculty of Law and Political Science, Faculty of Medicine, Faculty of Social Science, Institute of Management, Institute of Cultural and International Studies, as well as the Observatory of Versailles Saint-Quentin, all located in the agglomeration of Saint-Quentin-en-Yvelines, just a few kilometres from Versailles + a school of engineering and two university institutes of technology in three other cities of the region, offering higher education programmes from bachelor to doctorate level.

UVSQ is the leading university in France in terms of student success at bachelor level and ranks third for the number of apprentices in the Île-de-France region, reflecting a strategy that prioritizes educational innovation and professionally-focused international programs.

In 2016, UVSQ entered the so-called ARWU or Shanghai ranking (401-500 group) and is currently 4th in the CRWU ranking as far as atmosphere science and meteorology are concerned.

UVSQ's excellence in research concerns notably space observation, climatology and the environment, heritage and Arctic studies, health (esp. handicap and ageing), innovative materials, sociology, public administration. UVSQ's laboratories foster innovative, cross-disciplinary

research that anticipates societal concerns, informs citizens and supports decision-makers.

As one of the founding members of the excellence cluster Université Paris-Saclay, UVSQ is well positioned to meet the twin challenge of economic and technological competition combined with the acceleration of scientific developments worldwide.

University website: www.uvsq.fr

Masters2 programme in Arctic Studies at UVSQ/ University of Paris-Saclay

UVSQ initiated an original, interdisciplinary masters 2 programme in Arctic Studies entirely taught in English (French-language classes excepted) in 2010, now offered through the excellence cluster of the University of Paris-Saclay.

More than 50 French and international students coming notably from Greenland, the USA, Russia, Norway, Latvia, Macedonia, Armenia, India, Nepal, Ghana, Cameroun etc. have successfully graduated from this programme dedicated to integrated approaches to problems facing the Arctic.

Pedagogical objectives:

The aim of the Master is twofold: help future decision-makers and facilitators working in the Arctic or in relation to the Arctic to develop tools for integrated analyses thanks to in-depth knowledge of the fragile balance between ecosystems and the human ecology of the Arctic.

At the same time, the Master has been designed to provide students interested in research with the opportunity to develop a project that will be pursued in the form of a doctoral dissertation after the validation of the *Master*.

Such Phd work may be co-directed with one of our international partners.

The master covers three complimentary fields of competence: studies in all of the major areas essential for decision making:

- environmental and natural science as well as technology, economics and governance, geopolitical aspects and questions of law, Arctic societies and their culture
- scientific competence therefore reinforced by intercultural competence
- an international dimension with courses in English and colleagues of international reputation

Perspectives:

The Arctic Studies programme trains decision makers capable of piloting the process of expertise, facilitation and governance by relying on a method of eco-efficiency and global performance (environmental, economic, social and societal), of identifying and erasing obstacles to a respectful development of ecosystems and human ecology in an Arctic context.

The year of Arctic Studies will allow a student to develop the following fields of competence:

- piloting of a project by using special tools and management techniques : research team, international cooperation
- management of organisational change relying on a pluri-disciplinary approach
- autonomous conduct of an Arctic project or enquiry
- reflect on and mediation of social, technical and technological aspects
- economic and environmental evaluation of technological, financial, commercial and organisational risk

Prerequisites and organisation of studies:

Students from any academic field can apply provided they have validated four years of higher education (four-year B.A. programme or a three-year B.A.+ first year of a Masters programme), English language skills should be fluent (however, no special language test score is required).

Teaching starts in mid-September and ends in early February, followed by a three-month internship that the students choose themselves in France or abroad.

Students then write a detailed report on this experience and/or a long research paper/ dissertation. The report or dissertation is defended during a viva that can be organized by Skype in certain cases.

Applications

Applications are submitted electronically via the Paris-Saclay website: <https://www.universite-paris-saclay.fr/en/apply-to-master-programs>

Contacts:

Prof. Dr. Jan Borm, co-director of the programme: Jan.Borm@uvsq.fr

Dr. Alain Sarkissian, co-director of the programme:

Alain.Sarkissian@latmos.ipsl.fr

Notes for Contributors

a) Submission of Papers

Authors should submit an electronic copy of their paper in Word format file with the final version of the manuscript by e-mail by attached file to the Editor-in-chief and the co-Editors:

Enrique del Acebo Ibáñez: edelacebo@yahoo.com

Helgi Gunnlaugsson: helgigun@hi.is

Daniel Chartier: chartier.daniel@uqam.ca

Jarkko Saarinen: jarkko.saarinen@oulu.fi

Anna Stammer-Gossmann: anna.stammer-gossmann@ulapland.fi

Jan Borm: jan.borm@uvsq.fr

Submission of a paper implies that it has not been published previously, that it is not under consideration for publication elsewhere, and that if accepted it will not be published elsewhere in the same form, in English or in any other language, without the written consent of the publisher.

b) Manuscript Preparation

General: Manuscripts should not exceed 35 pages (including references and illustrations), and must be typewritten, double-spaced with wide margins on one side of white paper. The corresponding author should be identified (include a Fax number and E-mail address). Full postal addresses must be given for all co-authors. The Editors reserve the right to adjust style to certain standards of uniformity. A cover page should give the title of the manuscript, the author's name, position, institutional affiliation and complete address, telephone, fax and/or E-mail numbers. An acknowledgement may also be included on the cover page if so desired. The title but not the author's name should appear on the first page of the text.

Abstracts: An abstract of not more than 120 words and a list of up to 10 keywords should accompany each copy of the manuscript.

Text: Follow this order when typing manuscripts: Title, Authors, Affiliations, Abstract, Keywords, Main text, Acknowledgements, Appendix, References, Vitae, Figure Captions and then Tables. Do not import the Figures or Tables into your text, but supply them as separate files. The corresponding author should be identified with an asterisk and footnote. All other footnotes (except for table footnotes) should be identified with superscript Arabic numbers.

References: All publications cited in the text should be presented in a list of references following the text of the manuscript. In the text refer to the author's name (without initials), year of publication and possible page number(s) (e.g. Torpey 2000, 18). For more than three authors, use the first three authors followed by *et al.*

The list of references/bibliography should be arranged alphabetically by author's names. Names of the articles in edited volumes or journals are written inside the quotation marks. Journal titles and book names are italicised. Examples:

Torpey, John (2000): *The Invention of the Passport: Surveillance, Citizenship and the State*. New York: Cambridge University Press.

Levy, Jacob T. (2000): "Three Modes of Incorporating Indigenous Law". In: Kymlicka, Will & Norman, Wayne (eds.): *Citizenship in Diverse Societies*. Oxford: Oxford University Press, pp. 297–325.

Gilroy, Paul (1999): "Between Camps: Race and Culture in Postmodernity". In: *Economy and Society*. Vol. 28, no. 2, pp. 183–198.

Smith, Jane & Korsakofsky, Sacha (eds.) (1998): *Post-Capitalist Economies*. Anchorage: Alaska University Press.

Illustrations: All illustrations should be provided in camera-ready form, suitable for reproduction (which may include reduction) without retouching. Photographs, charts and diagrams are all to be referred to as "Figure(s)" and should be numbered consecutively in the order to which they are referred. They should accompany the manuscript, but should not be included within the text. All illustrations should be clearly marked on the back with the figure number and the author's name. All figures are to

have a caption and source. Captions should be supplied on a separate sheet.

Photographs: Original photographs must be supplied as they are to be reproduced (e.g. black and white or color). If necessary, a scale should be marked on the photograph. Please note that photocopies of photographs are not acceptable. All photographs are to have a caption and source.

Tables: Tables should be numbered consecutively and given a suitable caption and each table typed on a separate sheet. Footnotes to tables should be typed below the table and should be referred to by superscript lowercase letters. No vertical rules should be used. Tables should not duplicate results presented elsewhere in the manuscript (e.g. in graphs). (Authors are responsible for obtaining permissions from copyright holders for reproducing any illustrations, tables, figures or lengthy quotations previously published elsewhere. Permission letters must be supplied to FAE and A & A Journal).

c) Electronic Submission

Please specify what software was used, including which release, and what computer was used (IBM compatible PC or Apple Macintosh). Always keep a backup copy of the electronic file for reference and safety. Send text-files in Microsoft Word (.doc) file form, or as .rtf-files.

d) Copyright

Authors are required to assign copyright to *A&A IJCSCI* and *Fundación de Altos Estudios Antárticos & Ambientes Extremos*, subject to retaining their right to reuse the material in other publication written or edited by themselves, and to be published at least one year after initial publication in the Journal, mentioning where it was published first.

f) Book reviews

We welcome book-reviews of academic or non-academic books concerning circumpolar socio-cultural issues. Book-reviews should not exceed three pages, and must be typewritten, double-spaced with wide margins on A4 paper. In addition to information about the writer of review (name, title and institutional affiliation) review should include full

information about the reviewed book: Author(s), name, publisher, place of publishing and the number of pages.

e) Other contents

Articles, notes, information about international conferences and seminars, and items of general circumpolar interest are also published.

f) Peer-review

The Journal operates a blinded peer review process. The reviewers may at their own decision opt to reveal their name to the author in their review, although our policy practice is to remain both identities concealed. In general, Editors will seek advice from two or more expert reviewers about the scientific content and presentation of manuscripts. However, all submitted articles are reviewed at first by the Editors so that only those works that fit the editorial standards, and aims and scope of the Journal, will be sent for outside review.

The authors will be notified in case an article will not be published. Nonetheless, the Editors will not be held responsible for the return of the manuscripts.

Arctic & Antarctic

INTERNATIONAL JOURNAL OF CIRCUMPOLAR SOCIOCULTURAL ISSUES

CALL FOR PAPERS

The *Foundation for High Studies on Antarctica and Extreme Environments* (FAE, Argentina), the *Universidad del Salvador (USAL, Argentina)* and the University of Iceland, with the auspices of the *International Association of Circumpolar Socio-cultural Issues* (IACSI), publishes the annual, international, peer-reviewed journal called *Arctic & Antarctic – International Journal of Circumpolar Socio-cultural Issues*. The language of the journal is English.

This journal is created to provide a forum for the socio-cultural analysis of both circumpolar regions. Articles in the Journal will be devoted to promote an international and interdisciplinary dialogue concerning the following subjects: Local Communities and Extreme Environments; Habitat, Social Interaction and Identity; Social Problems and Policies; Minorities and Aboriginal Cultures; Migration and Socio-cultural Integration; Prehistory and History; Literature and Arts; Geopolitics and International Relations; Arctic and Antarctic Comparative Studies; and other issues related to socio-cultural themes concerning circumpolar areas.

The first issue of volume 1 of the Journal was published in November 2007. You can find the table of contents of each issue, and instructions for subscription from here: www.iacsi.org. The issue 12 will be published in June 2018. **Deadline for the manuscripts addressed to this coming issue is June 30, 2018.**

We encourage authors to send manuscripts that are within the areas of interest of both the Association and Journal. Furthermore, we also accept book reviews and commentaries on current research and societal/institutional affairs.

Se terminó de imprimir el 10 de Octubre de 2018,
en *Milena Caserola*, Lambaré 1026,
Ciudad Autónoma de Buenos Aires, Argentina.

The **Arctic & Antarctic International Journal of Circumpolar Socio-Cultural Issues*** (A&A-IJCSCI), is an international, peer-reviewed, scholarly journal published annually on behalf of the Foundation of High Studies on Antarctica and Extreme Environments (FAE, Argentina), Universidad del Salvador (Faculty of Social Sciences, Argentina), The University of Iceland (Faculty of Social Sciences) under the auspices of the International Association of Circumpolar Socio-Cultural Issues (IACSI) University of Iceland (Department of Sociology), the University of Jyväskylä (Department of Social Sciences and Philosophy, Finland), the University of Oulu (Thule Institute, Finland), , and the University of Québec at Montréal (International Laboratory for the Comparative Interdisciplinary Study of Representations of the North, "*Imaginaire du Nord*", Canada).

The **A&A-IJCSCI** has been created by scholars from Social Sciences, Anthropology and Humanities, and also from individuals with different backgrounds but interested in these perspectives and themes, to provide a forum for the study and discussion of the different and interdependent socio-cultural aspects of both circumpolar regions, promoting an international and interdisciplinary dialogue concerning the subjects thereof. In this sense, we privilege articles in the Journal with reference to:

- Local Communities and Extreme Environments
- Habitat, Social Interaction and Identity
- Social Problems and Policies
- Minorities and Aboriginal Cultures
- Migration and Socio-cultural Integration
- Prehistory and History
- Literature and Arts
- Geopolitics and International Relations
- Arctic and Antarctic Comparative Studies
- Other issues related to socio-cultural themes concerning circumpolar areas.

Thinking of the importance of a holistic understanding of the circumpolar phenomenon, we have also considered the need to study the "circumpolar theme" in its bi-polar dimension: the Arctic and the Antarctica, in order to look for convergences and divergences under the debates Local/Global, and North/South, and also looking for the production and transference of knowledge.

* *Logo and name legally registered.*

The next issue of *Arctic & Antarctic - International Journal of Circumpolar Socio-Cultural Issues* will be published in September 2019. Contributions must be sent before the end of July 2019. Besides articles, the issues can include seminar and conference reports, book reviews, comments or discussions.

The views and perspectives expressed in this journal do not necessarily represent those of the Editors and/or the Scientific Editorial Board.

© Fundación de Altos Estudios Antárticos y Ambientes Extremos (FAE, Argentina) and E. del Acebo Ibáñez.

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