TIME ZONE POLITICS AND CHALLENGES OF GLOBALISATION

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Received August 2013; accepted April 2014

ABSTRACT
Time zones are an under researched topic in geography. In this paper, their political construction is examined, and the conflicts that can arise between biological temporalities on one hand and the interests of international business and state politics on the other are discussed. A detailed map of major deviations from theoretical time zones in China and Europe is presented. The geographically complex and uneven adoption of daylight saving time is also shown on a map. An extended case study of time zone politics in Iceland is then presented. Its current time zone allocation has been contested from two very different viewpoints, where business concerns and geographical position are in conflict. Finally, new challenges to the global time zone system, arising from the increased economic globalisation and opportunities for social interaction in the new reality of cyberspace, are discussed. The concept of ‘time elasticity’ is proposed for partially grappling with these conditions.

Key words: Time zones, daylight saving time, time elasticity, globalization, political geography, Iceland

INTRODUCTION: THE TEMPORAL STRUCTURING OF SPACE

Time is the longest distance between two places. (Tennessee Williams – The Glass Menagerie).

Walk into the lobby of a major hotel and chances are that you will see a cluster of clocks showing different times: London, Paris, New York, Moscow, and Mumbai, perhaps. These clocks make visible what is otherwise a taken-for-granted division of global space into time zones – a kind of black box in the sense of Latour (1987). ‘One’s place on the globe positions one not only in space but also in multiple systems of time’ (Birth 2007, p. 216) – a fact that is not always fully recognised.

Time and space are often seen as foundational concepts in geography, and their tight interweaving has been suggested by frequently used expressions such as ‘space-time’/‘timespace’ (May & Thrift 2001), ‘time space compression’ (Harvey 1990), ‘time-space convergence’ (Janelle 1968, 1991), and ‘time regions’ (Brunn 2000). The time geography tradition instigated by Hägerstrand (1970) also warrants mention. Yet, Dodgshon (2008) is probably right in his assertion that time and temporality has been somewhat less thoroughly explored by geographers than space and spatiality. In particular, the construction of time zones has been almost neglected. Harvey and
Macnab (2000, p. 147) acknowledge that the importance and impacts of time zones ‘have largely escaped the gaze of academic researchers in the social sciences’ and that ‘the time of day will be one of the few things truly separating the world’s cultures’. An edited book on ‘timespace’ published over a decade ago (May & Thrift 2001) did not even include ‘time zones’ as a term in the index. Not much has changed since. Time zones are not mentioned in a recent discussion by Klinke (2013) that calls for a deeper understanding of time in critical geopolitical discourse. Given that time zones are purely political constructs, this is surprising.

Time is indeed not a given natural fact in human society, but a pliable social phenomenon that on closer inspection turns out to be a thoroughly relational construction. A ‘denaturalisation of time’ (Koselleck 2009) has occurred in most societies, whereby the temporal dimensions of natural cycles have been subjected to organisational structuring. The global system of time zones is of central importance. Time zones control our experience of daylight and darkness – perhaps the most fundamental of all our means of relating to the world. Established by leading political powers late in the 19th century in response to changing technologies of transportation and communication, these zones have been subject to much tweaking by states and regional authorities, but they still structure spatial interaction the world over and profoundly impact people’s daily lives.

The aim of this paper is to examine the constructed nature of time zones, and their political dimensions in particular. We first briefly highlight the potential conflict between astronomical realities and biological rhythms on one hand, and political power games and business concerns on the other (cf. Birth 2007). We then make the case for a geography of ‘time zone politics’. The origins of the current global system of time reckoning are summarised and some of its political aspects identified. The remainder of the paper consists of an extended case study of time zone politics in Iceland. Located between Europe and America (in space and time), Iceland is also a high-latitude country, which brings its own complications in terms of time zone decisions, where biology and business have clashed at times. The main material upon which the case study is based is official records from the Icelandic Parliament (Alþingi), supplemented by media articles and interviews. But we will start by examining the intricate bodily nature of the human temporal experience.

TEMPORALITY, BIOLOGY AND INDUSTRIAL SOCIETY

Nested deep within the mammalian brain, a tiny pair of nuclei control the times of our lives (Golombek & Rosenstein 2010, p. 1063).

All living things respond to temporal rhythms in their environment in some way, human beings of course too. Understanding the mechanisms of these responses is the task of chronobiology; a subfield of the biological sciences, and chronosociology; the study of rhythms and cycles (work, leisure, etc.) of society (Young 1988). There is much more to this than a simple stimulus-response relation; in addition to cues from the environment (or Zeitgebers, e.g. the sun coming up), the human body has its own inner temporality. This is the so-called circadian system (Golombek & Rosenstein 2010).

One interesting thing to note is the mismatch between the solar cycle and the human circadian cycle. Without external signals such as light, human physiological functions (e.g. body temperature) do not oscillate on a precisely 24-hour basis. For example, in a dark environment and with no other stimuli present, people tend to sleep a little longer each day, and go to sleep a little later each night. This means that the circadian system needs to be synchronised (or entrained, in the language of chronobiology) with the external environment. Apart from the ‘photic signal’ of sunlight, various other signals – cultural and social – can be the source of entrainment. A noisy alarm clock is a device that is often used, followed by a shower perhaps, and of course the first cup of coffee in the morning. Some people would even add a cigarette, although the number of these has been dwindling fast.

Notably, one of the questions that chronobiologists have sought to answer is that whether the sun or one’s social habits are more important for the regulation of the circadian
At least one study, based on a large-scale survey of sleeping habits in Germany, showed that the ‘rose-fingered dawn’ seems to be more effective. Going from east to west in the country, the researchers found a systematic and statistically significant delay in the timing of ‘mid-sleep on free days’ (i.e. non-working days) (Roenneberg et al. 2007). Having standardised for the cultural and social environment, they conclude that the sun is the paramount Zeitgeber for the human body.

For a long time in human history, the intricate biophysical clockwork of humans was able to do its work more or less unobstructed. In the pre-industrial era, everyday time was by and large ‘natural’, although various timepieces were invented for special purposes such as astronomical calculations. Mechanical clocks appeared in late medieval Europe and gradually became widely used, leading to changes in people’s ‘time consciousness’ (Thrift 1996). But it was with the advent of industrialisation that the reckoning of time changed profoundly (Thrift 1996). At first, towns and villages established their own local times, in accordance with the longitude. As communication systems became more complex, the need for standardisation grew (Zerubavel 1982). The introduction of nationwide mail services with horse-drawn coaches in Britain in the 1780s provided an impetus for standardisation, but the fundamental change came in the 19th century with integrated railway systems, first in the UK but soon also in continental Europe and the USA. The co-ordination of train traffic necessitated an exact and co-ordinated measurement of time, which led to the adoption of ‘railroad time’ that corresponded in most cases fairly closely with longitude (Bartky 1989). Space had been radically restructured by the new technology, but time itself was not subjected to similar restructuring – or ‘rationalisation’ – until the late 1800s.

**THE POLITICS OF TIME ZONES**

The world will end at 7:00 PM tonight. 7:30 PM Newfoundland (seen on a bumper sticker in Toronto).

The groundwork for the global zoning of time was laid with the International Meridian Conference held in Washington DC in 1884 (Zerubavel 1982). The participating 25 countries were an eclectic bunch of large and small political entities, but included the most powerful nations at the time: the USA, France, Germany, Imperial Russia and the United Kingdom. The main task of the conference was to decide upon a single central meridian for global time reckoning. After much political manoeuvring and against protests from France, the British proposal for a meridian passing though the Greenwich Royal Observatory was accepted.

In itself, the adoption of the Greenwich meridian was a marker of British political hegemony in the late 19th century: global time zone construction was politically charged from the very start. Thus the world time zone map became a ‘world’ map because of the European way of looking at global control and for ensuring its impress would be imprinted, permanent and non-negotiable. World maps with a Eurocentric perspective further solidified the Europeans’ definition of international time and space.

The worldwide system that was established in the years following the International Meridian Conference has proved to be enduring, despite radical changes in the worlds of politics and commerce. It is based on a set of designated meridians that mark the middle of each of the twenty-four global time zones. The zones themselves are identified as Co-ordinated Universal Time, or UTC, followed by a number denoting the zone’s position vis-à-vis the zone that centres on Greenwich. Greenwich Mean Time (GMT) is thus the same as UTC. Each of the time zones extends over 15° longitude.

However, many deviations from these ‘theoretical’ time zones can be observed and the zoning has been subject to substantial political manipulation. International political boundaries are often used as time zone boundaries, even if that may take parts of some countries far out of the designated zone (Figure 1). The case of China – a country that spans 60° longitude (corresponding roughly to the longitudinal distance between Reykjavik and Moscow) – is especially noteworthy (Figure 1a). China before 1949 had five time zones. Following the Chinese revolution, Beijing time (eight hours ahead of Co-ordinated Universal Time, or UTC+8) was
stipulated for the country as a whole. Thus the working day in the westernmost region of Xinjiang would begin in the middle of the night. The regional authorities have, however, adopted the workday to fit the location, so that the working day simply begins two hours later than in Beijing (Xinjiang Uygur Autonomous Region Government 2012). While nominally adhering to Beijing time, the region \textit{de facto} operates on ‘Ürümqi time’. There is little doubt that this bizarre arrangement serves central political aims:

Figure 1. Deviations from 15° time zones in China and Europe.
To introduce time zones would be to break with the myth of a unified China, admitting that the country has long been a heterogeneous mixture of peoples linked more closely to their bordering lands in Southeast Asia, Central Asia and Oceania than to each other (Gilley 2002, p. A7).

Although nowhere as extreme as in China, deviations westwards from the ‘correct’ time zone boundaries are rather common. Large parts of Europe are thus literally ‘ahead of their time’ (Figure 1b), including the Low Countries, France, Spain, Portugal, Iceland, and Western Russia. Deviations the other way around are much less common.

Only ten countries in the world use multiple time zones (not counting those with offshore island territories): Canada, the United States, Mexico, Brazil, the Democratic Republic of the Congo, Greenland, Russia, Kazakhstan, Indonesia and Australia. Russia, with its broad expanse, had eleven time zones until 2010 when they were reduced to nine (Government of the Russian Federation 2011). In the United States, the decision is to some degree decentralised: individual states and even counties can change their time zone by petitioning the US Department of Transportation, although very few changes have ever been made (Brunn 2001). The state of Indiana has in recent decades fiddled around with time zone questions; currently, most of it is in the Eastern Time Zone except for a dozen counties around the cities of Gary and Evansville, which are in the Central Zone.

**DAYLIGHT SAVING TIME**

An added complication is provided by the slicing of the globe into time zones is the common, albeit often controversial, adoption of Daylight Saving Time (DST) during summer months. Current reasoning for DST involves several issues, including energy cost savings, auto accident reduction, and increased leisure time. As early as 1784, the needless waste of candles caused by a mismatch between waking hours and daylight was pointed out in a humorous letter to *Journal de Paris* by none other than US scientist/politician Benjamin Franklin. The idea of changing the clocks was mooted again in New Zealand in the late 19th century and in Britain in the early 20th century (Prerau 2005). Germany and Britain were the first countries to adopt DST in 1916 (during the First World War), and the US followed in 1918 (Aries & Newsham 2008). After the war DST was abandoned, but Britain also went to ‘summer time’ or ‘War Time’ during the Second World War to increase production and save energy. The US also took up DST in 1942, actually for the whole year, not only the summer. After the Second World War some countries abandoned DST, but in the 1960s and 1970s it was widely adopted once more, again owing to energy saving concerns (Aries & Newsham 2008).

The current pattern of states and regions on DST is complex (Figure 2). There are entire countries on DST; some parts not on DST (Australia, Canada and Mexico). Other countries have implemented DST for a year or two. There are also some non-DST ‘islands’ within countries where DST is otherwise used: Eastern British Columbia and Western Saskatchewan and the Navajo reservation in Northeast Arizona. Understandably enough, countries closer to the Equator, where the seasonal difference in sunlight is not as great, generally do not observe DST, although some have tried it.

The European Union has required its member states to adopt ‘summer time’ since the 1980s (Commission of the European Communities 2007). Since 2001 the beginning and end of the DST period has been fixed within the EU, in the name of economic streamlining. Russian authorities decided in 2011 to abandon the twice-yearly changing of the clocks, although the transition was made by not reverting to standard time once most northern hemisphere countries end DST in late October 2011 (Government of the Russian Federation 2011). This effectively means that most Russians are now using clock time that is well ahead of the ‘natural’ time where they live, which has apparently caused considerable dissatisfaction because of the dark mornings they have to endure for much of the year (Gessen 2012).

**LOCAL TIME ZONE POLITICS: DEBATES IN ICELAND**

Above, we have highlighted some issues that we feel are important for the geographical analysis
of time zone politics. Many of these issues are visible in the case of Iceland. The country is very much part of Europe and most trade links and travel are oriented towards that continent; yet there are also substantial connections with America. Spanning some 13 degrees longitude (from 13°29′ W to 24°32′ W), Iceland has since the late 1960s followed Co-ordinated Universal Time, despite being located well to the west of the Greenwich meridian. But this legally adopted time zone has been contested since the mid-1990s. Divergent opinions have also been evident regarding whether or not to adopt daylight saving time. The northerly location of the country brings its own complications.

As elsewhere, clock time was a local affair in Iceland before the time zone system was introduced. Thus the clocks of Reykjavik were at the beginning of the 20th century set 1 hr 28 min behind Greenwich Mean Time, this being the mean solar time of Reykjavik (Figure 3a), whereas the easternmost town of Neskaupstaður was only 57 minutes behind GMT (Sæmundsson 1988). Standardisation was achieved with a law passed in 1907 by the Home Rule Government of Iceland. This stipulated that the time for the whole of Iceland be set to mean solar time at 15°W, i.e. one hour behind GMT (Lög um ákvörðun tímans, nr. 35/1907). There seems to have been little debate about this at the time.

When the innovation of daylight saving time (or summer time) was introduced in Europe during the First World War, Iceland followed suit. In 1917 legislation was adopted that made it possible for the government to move the clock forward in summer up to 1½ hour from standard Icelandic time by issuing a regulation to this effect each year (Lög um heimild handa ráðuneyti Íslands til ákvörðunar sérstaks tímareiknings, nr. 8/1917). The rationale was the same as in other countries that introduced DST at this time, namely energy savings. The clocks were first advanced one hour in late February the same year, with DST lasting until late October. This put Iceland on GMT for a good part of the year. Until the 1940s the DST period was not always the same, but eventually this was stabilised so that summer time began in early April and lasted until late October (Sæmundsson 1988).

This arrangement lasted until the late 1960s when new legislation was enacted that eliminated the option of summer time, but the twice-yearly changing of the clock had proved rather
unpopular in Iceland as in many other countries. Moreover, this legislation stipulated a new standard time for Iceland, namely Greenwich Mean Time (Lög um tímarekning á Íslandi nr. 6/1968). The bill had been prepared by two astronomers and a thorough argumentation was provided for Alþingi (the Icelandic Parliament). It was pointed out that many European nations had abandoned DST after the Second World War, its costs outweighing the advantages during times of peace. The northerly location, with long hours of daylight during the height of summer, was seen as negating the gains in daylight hours that DST could bring in mid-latitude regions. The inconvenience of time changes for air traffic, which was growing rapidly at the time, was highlighted. Various other reasons were provided, including the hassle of having to reset all workplace stamp-clock systems twice a year. The discrepancy between solar time and clock time during summer was not a real problem, as the scientists saw it, but changing the clocks was. Their solution was to suggest a new fixed standard time for Iceland – GMT; in effect putting Icelanders on ‘summer time’ for the whole year. Judging

Notes: Light grey indicates ‘civil dawn/dusk’, i.e. the time before sunrise where the centre of the sun is 6° or less below the horizon. Common working hours of employees (8am to 5pm) are indicated by a thick black box in graphs b-d. Based on data from Háskóli Íslands 2013.

Figure 3. Daylight and darkness in Reykjavik (68°08.5’N; 21°55.6’W) throughout the year and the impact of different time zone allocations.
from newspapers at the time of the change, the new arrangement seems to have been well received by most people. Some mentioned the likelihood of (even more) sleepy teenagers in schools during dark winter mornings, but this was not seen as a serious disadvantage.

Until the mid-1990s, this temporal regime (Figure 3b) existed without much discussion. But in 1994 a new proposal for a parliamentary resolution was introduced at Alþingi by some five MPs (Alþingi 1994). The group was spearheaded by a member of the right-wing Independence Party, who not coincidentally was also the chair of Iceland’s Chamber of Commerce at the time. The proposal suggested that Iceland again take up summer time, but not by going back to the old arrangement (with standard time UTC-1), but by staying with UTC+0 (or GMT) as standard time and advancing the clock one more hour in summer, to UTC+1 (Figure 3c). This would, the proponents argued, bring Iceland into line with most of Europe, as the European Union was proposing to standardise summer time arrangements for all its members.

It is noticeable that the weight of the argument here was squarely on the ‘convenience of commerce’ (cf. Brunn 2001). The explicit aim was to ‘increase productivity in the economy’ (Alþingi 1994). It was asserted that ‘numerous complaints had been made about the existing arrangements reducing productivity and weakening the competitiveness of the economy’ (Alþingi 1994). The time window for Icelandic companies for communicating with business partners in continental Europe was allegedly too narrow in summer, when the clocks in these countries were set to UTC+2. If Iceland changed its own clock at the same dates as the EU did, the problem would be solved. As an added bonus, the proponents of the resolution argued that the extra hour of daylight in the evening would ‘without a doubt create a better summer atmosphere’ (Alþingi 1994) – the nation would have more time after working hours for enjoying life outdoors. In a letter to a newspaper (tellingly entitled ‘Three ways to increase competitiveness’), the main protagonist argued:

Summer time . . . moves the natural noon in Iceland to about half past two. This means that the sun can still be reasonably high in the sky when people come home from work during summer, and the nation will therefore have better opportunities for enjoying the short summer. – Who can resist the thought of the smell of barbecues from the nation’s backyards? (Egilsson 1994, p. 14)

Even with such temptations thrown into the reasoning, the proposal was met with indifference and even incredulity by the general public. The proposal was not taken very seriously by other MPs either and there was little debate – only one opponent spoke. He was indignant that ‘the European Commission [was] suggesting that Icelanders should once again start rattling with their clocks’ (Alþingi 1994). Moreover, he mocked the argument of the ‘summer atmosphere’, advising the protagonist ‘to add to the proposal a provision obliging the Icelandic Meteorological Office to provide good weather for the whole of summer, so that people can enjoy the sun’ (Alþingi 1994). Eventually the proposal was sent to a parliamentary committee for review, only to be quietly put away.

Undeterred, the MP who had drafted the first proposal tried again in 1996, this time with a bill for changing the 1968 legislation. The same arguments were advanced regarding the importance of commercial links with Western Europe, but somewhat more weight was put on the assumed beneficial social impact of the change: summer time would be good for football players and golfers, for example, and especially for those people living in villages and towns surrounded by high mountains, where the sun disappeared early in the evening. It would also be good for tourism, as most tourists were coming from mainland Europe. Again, the response was somewhat limited, but more arguments were drawn in. It was pointed out that while time to do business with Europe would increase, the opposite would be the case regarding business with America. Given Iceland’s northerly location and corresponding extremes of winter darkness and summer light, the original energy-saving rationale that lay behind the introduction of summer time was deemed invalid. Finally, biological and psychological arguments were also rallied against changing the clock (Alþingi 1996).
Once again, the matter was sent to a committee, which requested opinions from numerous experts and parties of interest. Many and sundry reasons were provided, for and against. As an example, the Football Association of Iceland opined that the football season was so short that it was difficult to fit all matches into the schedule. Advancing the clock would help in solving that thorny problem. Icelandair, the national airline, was also positive. On the other hand, a very negative opinion was forwarded by experts at the National Hospital of Iceland, who had been undertaking research into the sleeping habits of Icelanders and their impact on alertness and mental health. Among their findings was that ‘Icelanders go to sleep and wake up an hour later than other European nations, and the only reason is that the clock here is now one and half hours wrong’ (Alþingi 1996). The bill was never voted upon.

The same proposal for changing the legislation of time was again tabled in parliament in 1998 and yet again in 2000, always with the same outcome, although the gravity of the matter seemed to be gradually increasing (Alþingi 1998, 2000). In 2000 substantial discussions took place, with many MPs joining in. All the previous arguments were taken up for extended debate – commercial and social benefits on the pro side, countered by biophysical research, worries about confusion, and the alleged futility of change because of Iceland’s location in the north. Some antagonists made much of the political and economic dimension of the proposal:

It is pretended that there is nothing west of Iceland . . . We would be . . . three and four hours ahead of . . . our next geographical neighbours, the Greenlanders. People of course think it is very silly to talk about Greenlanders in this regard. We do not do much business with them, and the honourable Chamber of Commerce does not think much about Greenland . . . I feel it is rather small-minded really to think that Iceland cannot be independent in these matters and have its own time zone, and interact with its eastern and western neighbours, just because we are where we are. We are not going to pull the country to another location (Alþingi 2000).

Most of those who in the 1990s aired their opinions in the newspapers, about these persistent attempts to change the time zone, were against the idea. They included natural scientists and astronomers (e.g. Björnsson 1994; Thorlacius 1997), for whom the proposals ran counter to the facts of nature, and members of the general public who resented what they saw as promotion of ‘narrow special interests’ at the expense of the greater societal good, and pointed to some holes in the reasoning. About the argument that summer time would benefit tourists and golfers, one commentator asked for example:

Which tourists? Can one be a tourist without taking due notice of geographical position? And cannot the super-energetic golfers adjust their working times so that they start at 7 in the morning and finish an hour earlier to pursue their sporting interests? (Danielsson 1997, p. 55).

In 2006 a new group of parliamentarians took up the issue once more, the original proponent no longer a sitting member. This time round, the original emphasis on commercial interests had been removed completely; the argument centred entirely on the alleged social benefits (Alþingi 2006). Nothing came out of that either.

The last parliamentary proposal for changing the clocks of Iceland was put forward in 2010, but it involved a radically different view of things. It involved moving Icelandic Standard Time back to UTC-1 (Figure 3d), with no provision for summer time (Alþingi 2010). Carried by a broad group of MPs from all parties, this proposal for a parliamentary resolution put much weight on the findings of medical and biophysical research regarding the importance of morning light for biological and mental functioning. The discordance between clock time and biological time was especially harmful for young people, according to this argument, and negatively affected their performance and school and quality of life in general. Commercial arguments against the proposed change were seen as invalid, in a technological age of instant communication. The proposal was not taken up for parliamentary debate, but some discussion ensued in
the Icelandic media and by bloggers and commentators.

**IDEOLOGIES AND INTERESTS IN THE DEBATE**

This history of stillborn proposals for changing Iceland’s time zone reveals ‘time zone politics’ of several dimensions, we argue. At the centre of the political tussle is the ideological struggle about the weight that should be given to commercial interests. It is not coincidental that the campaign to advance the clock one more hour started in the early 1990s. This was a time of profound economic changes. In 1991, a new government led by David Oddsson of the Independence Party took the reins of power, in a coalition with the Social Democrats. This marked a neoliberal ideological turn that was to last for almost two decades. Interests of big business became even more important in the political discourse than they had previously been. Oddsson was a resolute EU-sceptic to be sure, but also a fervent believer in the ‘free market’. The Social Democrats were on the other hand enthusiastic about closer relations with the EU, and had adopted very a pro-market stance influenced for instance by Blair’s ‘New Labour’ in Britain.

In 1994 the European Economic Area (EEA) was formed, merging the large internal market of the European Union with that of the countries of the European Free Trade Association (EFTA). Iceland joined the EEA together with fellow EFTA countries (apart from Switzerland). Participation in the EEA was controversial among the general public, but Iceland’s business community was very positive and lobbied hard for further integration with Europe. The EEA was presented as offering the best of both worlds – access to the large EU market without having to cede decisions in some important matters (most notably fisheries management) to the EU, as full membership would.

The proposal for changing the time thus came from a business community gripped by a certain ‘EU-phoria’, as it were. It became part of a larger project of the ‘Europeanisation’ of Iceland by a section of the business and political elites. As Clark and Jones (2008, p. 302) argue, the concept of Europeanisation has both temporal and territorial dimensions: ‘Europe as a bordered area is in constant flux, with its changing territories variously including and excluding peoples with often conflicting “European” conceptions, attitudes and visions’. At the physical margins of Europe, and with strong US presence for much of the post-war years, Iceland has indeed had a complex relationship to the continent (Thorhallsson 2004; Clark & Jones 2012). The proposal could be seen as an attempt to cement relations with (continental) Europe in a small yet significant way.

Those speaking for advancing the clock came mainly from the right of the political spectrum – the Independence Party – with some from the centrist Progress Party joining in, as well as from the Social Democratic Party. There were sceptics, however, within all these three parties, some of whom were the fiercest opponents of the idea when it was debated in parliament. Of the four major political parties, only one unambiguously opposed the attempts to advance the clock. This was the socialist People’s Alliance (later the Left-Green Movement). Their argument was partly that business interests should never be allowed to dictate such elementary matters as the reckoning of time, and partly that the European (or EU) focus was much too narrow: Iceland should cultivate commercial links in other parts of the world too, and the change would not be conducive to that.

In the new century, the steam appeared to run out of the proposal. This is somewhat surprising, given the fact that this was a period where ever more radical neoliberal economic policies were being pursued. State-owned enterprises and banks were privatised and the financial environment deregulated. A ‘bubble economy’ of incredible dimensions developed and the financial sector grew out of all proportion to the rest of the country’s economy. The boldest business tycoons and politicians wanted Iceland to become a financial centre on par with Luxembourg or Switzerland. For establishing offshore banking services, some actually saw a potential niche in being in a time zone in between Europe and the United States (Morgunblaðið 2000).

All this ended abruptly in 2008, with the near-collapse of the Icelandic economy (Wade 2009; Benediktsson & Karlsdóttir 2011). Partly resulting from acute problems in the international financial system, but also very much a
home-grown problem, the financial house-of-cards came tumbling down. Anger towards the business and political elite surfaced in public demonstrations of a kind rarely seen in the country. The nation underwent a very sudden change of mood – now the influence that big business had wielded in the recent past, impacting upon just about every facet of Icelandic society, was criticised heavily. Radical reform of the country’s political culture and institutional framework was called for. And – application to the EU was lodged in 2009 by a new left-leaning coalition government.

The other proposal for time zone change, the one tabled in 2010 which suggested that Iceland be put back into its ‘natural’ time zone, must be seen in this light. While supporting the argument with biophysical evidence, the politician who spearheaded this proposal acknowledged in an interview with the authors that this could and should be interpreted as a critique of one-sided economic reasoning. This is time zone politics with a different twist – although this very politician, Guðmundur Steingrímsson, is also one of the most ardent current proponents of joining the EU. In 2012 he broke away from the Progressive Party to form his own, appropriately named, Björt framtíð (Bright Future), together with others who wanted to shake up the old political culture (see Boyer 2013). Bright Future got six MPs in elections in April 2013. While changing the time zone to UTC-1 is not mentioned as a priority on the party’s website, the idea is still alive as a potential small part of a more encompassing reform of a political process that has lost much of its legitimacy in the eyes of the public.

In fact, public support for the change to UTC-1 has grown since the idea was first mooted in 2010. A nationwide opinion poll in December that year showed that 41 per cent of the population were for such a change, whereas 39 per cent were against it. In a more recent poll, taken in late January and early February 2014, some 58 per cent of respondents turned up on the supportive side – and 30 per cent being ‘totally supportive’) – but only 23 per cent opposed. Some 19 per cent neither supported nor opposed the idea (Capacent Gallup 2014).

There seems to be a broad feeling in Iceland, however, that changing the clocks between summer and winter would be rather pointless. Energy savings are not a pressing issue – not only does the country have abundant electricity from hydro and geothermal power sources, but the abundance of daylight (and darkness) that come with a northerly location largely negate the gains in afternoon light during summer. Even so, some of those speaking for adopting UTC-1 as standard time say that the public health gains from this change in winter would justify keeping the current ‘summer time’ (i.e. UTC+0) in summer, however unpopular such ‘rattling with the clocks’ would be. This would in effect ‘put the clock back’ to the situation before 1968.

CONCLUSION: TOWARDS ‘TIME ELASTICITY’?

Everything has become contemporary (Latour 2004).

In this paper, we have first discussed the political organisation/construction of space and time on an international scale, and illustrated with several examples how time zones have been both constructed and manipulated to serve political and economic goals. Second, we have examined in some detail one example of recent time zone politics – those of Iceland, showing how complicated arguments and ideologies have come together in the political discourse on time.

The reality facing places and individuals in a world of fluidity, speed and contemporaneity is, of course, much different from that which existed in the 19th century, when the building blocks of the current system were established. What new challenges – and opportunities – arise in an era of ‘timeless time’ as Castells (1996, 1998) put it, where instantaneous electronic communication has become the norm? Can one perhaps now speak of ‘time elasticity’ – parallel to the concept of ‘place elasticity’ (Barcus & Brunn 2010) – of people going about their everyday lives in temporaliities that have little to do with their geographic residence? Quickening pace of interaction, increased portability, and impermanence of time during a work day and week and across multiple time zones result in some different geographies and geometries of human identification and behaviour. For instance, Harvey and Macnab (2000) discuss, map and graph home, work and
alone Internet use in Canada’s time zones, pointing out variations across six time zones during the day. With empirical studies in the Netherlands and USA, Schwanen and Kwan (2008) reveal the complexity of responses to networked communication possibilities: while spatial and temporal fixity of activities is relaxed, new space-time constraints – including gendered ones – are also created.

The immense spatiotemporal consequences of a networked world have thus been increasingly recognised by geographers, as well as by other scholars, for example, social psychologists, anthropologists, sociologists and economists. The idea of time elasticity is rooted in this recognition. As a metaphor, this concept may offer a fruitful way to grapple with these new conditions, which relate both to changing technologies and the globalisation of economic processes, and which provide particular challenges for the system of time reckoning. The global economy of production is no longer centred on Europe – as it was when the time zoning system was instigated, and not even on the European-North American axis; it is now truly global. Workers are in contact with supervisors half a world away; executives and specialists are also working and living in different places and different time zones, often within the same week. These changes have profound implications for human lives, which go beyond simple economic productivity and economic efficiency. As Birth (2007, p. 226) has cogently observed, ‘[t]ime-space compression does not make a flat earth, but by virtue of our existing on a globe it makes some of capitalism’s contradictions physically and mentally excruciating for those touched by it’. International investments and stock market performances have in fact been shown to be affected by time zones and daylight saving arrangements (Kamstra et al. 2000; Stein & Daude 2007; Egger & Larch 2013). Adopting ‘global time’ has even been seen to be a basic prerequisite for restructuring the Spanish workday. All in all, there is thus ample room for further geographical research on the political construction of time – a concept that seems to be increasingly elastic.

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