

The dynamics of frame-bridging: exploring the nuclear discourse in Scotland

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Abstract

Simple indicative factors such as political populism and resource abundance cannot fully explain the Scottish Government's anti-nuclear energy policy. To grasp the current policy stance, it is necessary to pay attention to the wider contextualisation of policy framing and specifically the dynamic of story-telling and frame-bridging that ultimately feeds into governmental policy. The Scottish Government's decisive NO to a new nuclear fleet can be better understood by considering the underlying (and deliberate) bridging of policy frames that is noticeable between environmental, pacifist, and Scottish independence actors. This bridging not only affects the individual sets of story-telling but also develops a dynamic that reinforces individual stories and transcends well beyond the groups' original remit and objectives. With the help of policy framing analysis, research interviews and documentary analysis, the article explores the dynamic connections between anti-nuclear and independence activists and their causes in Scotland. The article highlights their triangular bridges in terms of personnel, language and story-telling and argues that these are instrumental in shaping the Scottish Government's anti-nuclear energy policy.

Key words: policy-frame analysis, Scottish governance, nuclear discourse.

Introduction

Political discourse and public policy are shaped by discursive opportunity structures and political story-telling unique to any given system and society. Discourse is not determined by straight-forward cost-benefit analyses of political elites but rather by the continuous construction and framing of policy positions and stories formed by open and fluid actor memberships. In some cases, two or more previously separate policy frames are (intentionally or unintentionally) connected, thereby developing a dynamic which not only consolidates and reinforces the framing and expression of individual policy stories, but also influences the constellation of the discursive opportunity structures themselves, whilst reasserting certain identities of actor groups as well as their relationships.

It is against this backdrop that the following article analyses the Scottish nuclear discourse. Synergies between civil and military nuclear debates vis-à-vis Scottish independence have been noted in the past (see, for instance, Heffron & Nuttall 2014), however the dynamic that these *triangular linkages* produce require further attention as these have an impact on further nuclear policy decision-making and, indeed, UK-Scottish inter-governmental relations. The nuclear discourse (be it *civil* i.e. nuclear energy or *military* i.e. nuclear deterrence/ coercion) has been a contentious and polarised one fought at many levels. Considering the sheer volume of arguments, statements and actors on either side of the debate, it is interesting to note the clarity and determination with which the Scottish Government has not only declared its opposition to nuclear energy in Scotland (with a decisive *NO* to new nuclear power plants and a phasing-out of the two remaining nuclear power stations: Hunterston B and Torness), but also its opposition to military nuclear deterrence (with Trident at the heart of its campaign). With a moratorium on fracking (until 2017) restricting the energy mix further as well as concerns over Scotland's long-term energy security (as raised recently by the Institution of Civil Engineers Scotland), the question arises as to how it is possible for the Scottish Government to maintain its determinately anti-nuclear position? With a U-turn unlikely in the foreseeable future, the answer may be found in the dynamic of policy-frames and story-telling particular and inherent to Scottish politics and society.

With the help of policy framing analysis and targeted qualitative research, the following article explores how the two stories of civil and military nuclear power are bridged into an inter-connected framework, thereby contributing to a policy that is distinctly (and uncompromisingly) anti-nuclear. This anti-nuclear stance gathers further momentum through another frame-bridging connection with the wider, ongoing story-telling and framing process relating to the Scottish (national) identity and self-determination. This triangular bridging between environmental, pacifist and Scottish independence activists not only reinforces their

individual causes and identities, it also helps cement joint agendas and a collective identity. The article shows how the Scottish Government reflects this dynamic story-telling and how it translates it into the public policy context. It argues that while the Government cannot claim unreserved public support in its anti-nuclear stance, a lack of forceful or effective veto power allows the Government to pursue its stance.

Setting a Conceptual and Methodological Framework

Coming from the research discipline of politics, the author is currently teaching Sustainable Development (SD) at a Scottish University. This association has exposed the author to more inter-disciplinary (and arguably more holistic, normative and participatory) thinking as well as a willingness to explore research methods that may transcend conventional and disciplinary boundaries. One such insight is the reflexive manner with which SD scholars identify and construct their research project. The idea for this particular study arose from initial observations and preliminary comparisons of different nuclear energy policies. These observations revealed an emerging and increasing policy divergence which was further heightened by the Fukushima incident in 2011. This divergence was observed not just *between* states (e.g. Germany and France) but also *within* states (i.e. between Scotland and the rest of the UK), a trend occurring despite a general sharing of two essential challenges: the need to provide for energy security whilst simultaneously tackling climate change. These observations inspired the author to explore the underlying reasons behind the distinct determination with which the Scottish Government has pursued its anti-nuclear policy.

There are ample indicators that would suggest the need for a change in Scottish policy: for instance, nuclear energy contribution formed an important and integral part of the overall energy mix seeing only a small fluctuation in recent years from a 34.9% to 34.3% to 34.4% share in Scotland's overall energy mix (Scottish Government 2016) with commentators in the

media and energy sector branding the Scottish Government's nuclear phase-out policy as 'naïve' and 'foolish'. And yet: a political U-turn appears to be unlikely. It could be argued that the driving forces are not so much based on sober, rational scientific reasoning but rather reflect normative and political considerations borne out of the frame-bridging and story-telling unique to the Scottish polity. True, certain factors lend their support to the current policy stance; for instance, Scotland's expertise in hydropower and, more generally, its expanding renewables sector are testament to Scotland's competitive edge in seeking alternative energy sources.¹ While this renewables advantage may contribute to the current policy stance, it cannot explain the whole anti-nuclear policy story. Similarly, the perception of an 'us versus them' attitude between Holyrood and Westminster (as perceived by a Labour MSP, research interview, 29/6/12) or the argument that the Scottish policy is different simply because it can be different, do not capture the whole story of the anti-nuclear policy in Scotland. It is argued here that it is necessary to consider the wider context i.e. the complexities and interconnections between actor groups in Scotland and their policy stories and journeys. In the case of current Scottish nuclear policy (or rather: policies), Scotland's stance vis-à-vis nuclear energy is based on previous frame-bridging between civil and military nuclear energy policies as well as the frame-bridging between nuclear issues and Scottish self-determination, together forming a triangular and dynamic policy scenario. In their insightful analysis *Scotland, Nuclear Energy Policy and Independence*, Heffron and Nuttall (2014) acknowledged the link between civil and military nuclear debates vis-à-vis Scottish independence but then steered clear of these synergies. While their investigative focus lay elsewhere, it certainly encouraged the author of this article to investigate these synergies further. More specifically, this study focusses on the following research proposition:

The framing and bridging of three, seemingly separate (even disparate), issues can contribute to a dynamic that affects not only stakeholder perceptions of policy reality as well as the public policies themselves, the frame-bridging also affects the actors involved as well as their relationships and alliances within discursive opportunity structures.

As the above use of terminology already suggests, the study is informed by *policy framing* literature (e.g. Schön & Rein 1994; Benford & Snow 2000) and shares an interest in ‘the politics of signification’ (Hall, 1982) whilst acknowledging the construction of collective identities and ‘shared meanings’ (Gamson, 1992). It notes the importance of speech acts, as well as varying perceptions of policy realities and the inter-linkages between actor reflections and policy adjustments. Actors and their story-telling are considered within the contexts of political (or more specifically: discursive) opportunity structures which are defined as specific configurations of resources, institutional arrangements and historical precedents for social mobilisation, which either facilitate or constrain social mobilisation (Kitschelt 1986). Within these structures, policy frames operate as ‘structures of belief, perception, and appreciation which underlie policy positions’ (Schön and Rein, 1994). As Reber and Berger (2005) would put it, frames are ‘interpretive structures through which individuals organise and make sense of an ambiguous stream of events and issues in the world’. Policy framing refers to the actual *process* of forming and articulating views, perceptions and beliefs. These are akin to the *politics of signification*, i.e. the process of forming and constructing collective identities, speech acts as well as reflections and evolving ideas, all influenced by the contextuality of political or discursive opportunity structures. There are many types of framing, which Benford and Snow (2000) usefully summarise and categorise. The most intriguing, and for this study most relevant, category is the process of *frame-bridging*, which adds a dynamic and indeed vital dimension to the conceptual framework. As Benford and Snow (2000, 624) put it, frame-bridging ‘refers to the linking of two or more ideologically

congruent but structurally unconnected frames [...].’ This notion of linking is reminiscent of *strategic bandwagoning*, a term used by Jinnah et al (2011) to describe and highlight the *deliberate* and strategic overlap of interests and policy missions in order to affect policy change. Other, and to a certain extent related, types of *framing* include those characterised by the *extension* of interests into other areas of interest and the *amplification* of sets of values. All these processes have multiple impacts and can develop a dynamic that goes far beyond the specific group or issue involved at the outset. Not only can these complex and interconnected frames reinforce identities, objectives and relationships, they can also cement certain sets of beliefs – as is the case with the anti-nuclear stance presented by the Scottish Government - and can have knock-on effects on other discourses that are not necessarily within the remit of the original policy issue.

With these conceptual ingredients in mind, the author conducted a documentary analysis of Scottish policy frames, examining discourses relating to civil and military nuclear power and connecting these to wider discourses on Scottish self-determination. NVivo software was used to identify and then analyse inter-linkages and synergies between the policy frames and then highlight areas where these inter-linkages contributed to a new dynamic in policy-making in Scotland. The author focused in particular on documents and statements over a 10-year period (2005-2015) from actor groups prominently involved in the civil and military nuclear discourses; these include the Faslane Peace Camp, Scottish CND, Friends of the Earth Scotland, LINK Scotland, and members of the Scottish Parliament and Government. The findings sheds light onto overlaps in terms of language and personnel sharing while also drawing attention to the active frame-bridging between stories and actors’ pooling of resources which, ultimately, translate into an anti-nuclear policy formulation.

Contextualising the Scottish nuclear energy discourse

Political discourses, story-telling and frame-bridging have to be understood as embedded in a wider political context. In the case of Scottish nuclear energy discourse it is necessary to contextualise the structures within which actors operate. Scotland is currently relying on an energy mix to meet its own energy demands and energy export (27.9% in 2013; 23.7% in 2014, see *Scottish Government Energy in Scotland*, 2016) to the rest of the UK. Whilst pursuing climate change targets of greenhouse gas emission reduction of 80% on 1990 levels by 2050, with an interim target for 2020 of a 42% reduction on 1990 levels (Climate Change (Scotland) Act 2009), Scotland is committed to renewable energy and electricity targets, for instance meeting at least 30% of energy demands from renewables and delivering the equivalent of 100% of gross electricity consumption from renewables by 2020 (Routemap for Renewable Energy Scotland, 2011; Electricity Generation Policy Statement, 2011). In recent years, renewables and nuclear sectors generated nearly two thirds (64.2%) of Scotland's electricity output and the nuclear output has seen a slight fluctuation from 34.9% to 33.3% to 34.4%. Yet, despite this minor fluctuation, the Scottish Government is determined to see out the last fleet of nuclear power stations and rules out their replacement. Like other UK nuclear power stations, commissioned in the 1960s to early 1990s, the two remaining Scottish nuclear power stations - Hunterston B in North Ayrshire and Torness in East Lothian – are approaching the end of their 'lifetimes' and the question arises whether to extend their 'lifetimes', decommission them permanently or replace them with a new generation of nuclear power plants. While the current UK Government is pursuing a policy of facilitating a new generation of nuclear power stations, the current Scottish Government is taking an opposite stance, summed up as:

- Nuclear energy generation is not necessary in the long-term;
- in a post-nuclear Scotland it will not be necessary to import energy (in other words, Scotland will remain energy secure);

- supporting the nuclear option would prove to be *expensive and dangerous* in the long term.

There is, obviously, a policy divergence from the rest of the UK, which had emerged before both governing parties – the Conservatives in Westminster and the SNP in Holyrood - entered office. The current disparity in policy can be traced back to an ongoing dispute spanning several decades and involving actors from the whole spectrum of the party political landscape as well as other, non-parliamentary, actors. One key milestone was a heated debate in 2001 in the House of Commons on the issue of nuclear energy, which was further fuelled by a rift within the then Labour Government, which in turn was resolved by a compromise put forward by the then Prime Minister Tony Blair. In effect, Blair conceded that the final decision whether or not to commission new nuclear power stations in Scotland would rest with the Scottish Parliament and Government (*The Glasgow Herald* 2002, *The Scotsman* 2006). Since then, consecutive UK Governments have steered well clear of Scottish sites for nuclear energy development, allowing the current Scottish Government to express, and pursue, a ‘no chance to nuclear’ energy policy. The sentiments of SNP politicians such as the then SNP Energy Minister Jim Mather, who put it bluntly: ‘Scotland does not want or need new nuclear power’ (Scottish Parliament Question Time, 2008), are very much reflected in numerous official documents such as the *Climate Change (Scotland) Act 2009* and the *Electricity Policy Statement* of March 2012. Furthermore, the Scottish Government commissioned *Scottish Generation Scenarios and Power Flows*, published in November 2011, provided further evidence in favour of the Scottish Government’s anti-nuclear energy policy. Indeed, in a research questionnaire the Scottish Government’s Energy Markets Unit confirmed to the author that there is a ‘clear divergence in policy [between Holyrood and Westminster] with regards to new-build nuclear power. [...] Scotland’s abundance of wind and wave/ tidal power mean that a future energy mix in Scotland does not need to be

dependent on new nuclear power stations, which are expensive to build, expensive to decommission and leave a legacy of hazardous waste.’ (Written response to online survey, May 2012)

Evidently, a crucial point of departure in the nuclear energy discourse is the question whether to pursue the commissioning of a new fleet of nuclear power stations, which would ensure the longevity of the nuclear energy sector and, arguably, energy security in Scotland for the long-term. Having outlined the general policy context, we can now move on to exploring the storytelling that preceded and contributed towards the Scottish policy stance. In order to understand this stance, we need to consider the underlying *policy frames* involved and, more importantly, consider any *bridging* between these frames and their stories. To what extent do the linkages between policy frames generate a *dynamic* that contributes towards this determined anti-nuclear approach? To allow for reliability and credibility, it is necessary to check for causal links, more specifically dynamic connections, synergies and symbiotic relationships between the different policy frames: civil and military nuclear energy and Scottish self-determination. Are the bridges between frames deliberate and intentional or just coincidental? And do they matter in the policy formulation? To try and unpick these dynamics and connections, this analysis focuses on documentary discourse analysis by collecting and evaluating documents and statements from influential actors in the Scottish nuclear debate - particularly the anti-nuclear debate -, checking for joint or shared language and paying attention to connections between policy frames in terms of data, documents and personnel.

Data analysis

For the purpose of this project, data research and analysis was narrowed down to 53 documents (listed in *References* below) produced by nine key groups prominently involved in the story telling and construction of normative values in the target frames: nuclear energy,

nuclear deterrence and Scottish self-determination. The groups were identified as significant in the frame articulation and involvement in their particular spheres of interest.

The following section summarises the key findings from the documentary analysis. Firstly, the analysis confirms a wider perception conveyed by researchers (e.g. Chalmers and Wallace, 2013) and story-telling actors that both nuclear stories and the Scottish self-determination story have been historically and incrementally linked together long before the SNP took governmental office. With statements such as ‘nuclear power was introduced as a cover to produce nuclear weapons’ (Scottish National Party Campaign for Nuclear Disarmament, <http://www.snpcnd.org/power.php>), thereby firmly connecting civil and military nuclear stories, the frame-bridging extends into the Scottish self-determination story: the location of both nuclear power stations, nuclear material production sites and nuclear military bases continue to be considered as determined (if not imposed by) by the UK Government. Some of these historical connections are based on myths and conspiracy theories, yet they still have an effect on the story-telling and the bridging of frames in general. The overall, socially constructed and normative triangular link is reflected not only in the language that anti-nuclear movements (civil and military) and Scottish independence campaigners apply, but is also evident in the cross-over of personnel from one frame to another. High profile examples include First Minister Nicola Sturgeon who was a CND member before she joined the SNP. For her, opposing nuclear deterrence and indeed the general notion of strategic military coercion, specifically in the form of Trident missiles, is a matter of principle and ‘not a bargaining chip’. The First Minister is not the only actor connecting the two frames, other connections were confirmed during the research of this project. For instance, one research respondent stated that they held vice chair positions in both Scottish CND and SNP, although not simultaneously but in succession (email correspondence, 3/7/14).

Also, in terms of campaigning, the research uncovered numerous examples that illustrate how actors from the different groups pool their resources with relative ease. The following examples illustrate the diversity of linkages:

- * Anti-nuclear protesters from the Faslane Peace Camp and Scottish CND joined forces with the *radical independence campaign* to organise joint events entitled *Another Scotland is possible*, targeted at Edinburgh and Glasgow University Freshers.

- * MSPs from the SNP and the Scottish Greens were involved in Peace Camp protests (e.g. representing the ‘North Gate Crew’) and hosted visits to Holyrood by Peace Camp delegations (e.g. to screen the ‘Visit Faslane’ film by the *Camcorder Guerrillas*).

- * Friends of the Earth Scotland not only addressed the issues of civil and military nuclear power simultaneously, they also considered Scottish autonomy as instrumental in reaching their anti-nuclear objectives. For instance, with reference to the Fukushima nuclear disaster, the FoES Director welcomed Scotland as ‘one of the world’s leading nations saying no to new nuclear power stations’, while also openly supporting the Scottish Government in their rejection of ‘the UK’s nuclear waste’ and ‘nuclear weapons of mass destruction’.

It is interesting to note how both anti-nuclear groups – civil & military - utilised the discourse leading up to the Scottish Independence Referendum in September 2014 to not only bring their particular causes to the forefront of the political debate, but also to use the referendum and its possible aftermaths as an obvious and deliberate *bandwagoning opportunity* to combine, reinforce and, indeed, amplify their particular anti-nuclear causes. In fact, their active cross-referencing developed an interesting binary dynamic in that it strengthened the supporter base on Scottish independence, whilst keeping the momentum and pressure going

regarding nuclear issues; issues that would have had to compete with a range of other public policy issues. In a sense, the period leading up to the Scottish Referendum represented a critical juncture for anti-nuclear activists and an opportunity to consider and strengthen potential scenarios, strategies and alliances. Their assessment of the situation boiled down to (what anti-nuclear story-tellers would describe as) a *rational* thinking process: an independent Scotland would have a written constitution that would enshrine the importance of the environment. This, according to the FoES Director, would be the ‘single most powerful environmental argument in favour of a *yes* vote’ at the Scottish Referendum. Similarly, the Scottish Campaign for Nuclear Disarmament argued that ‘[i]n the event of Scottish independence, the parliament in Edinburgh would have the legal right to require the London government to remove nuclear weapons from Scotland’. Indeed, ‘[a] prohibition of nuclear weapons, or all Weapons of Mass Destruction, could be written into the constitution of an independent Scotland’. It is therefore not surprising that Scottish CND openly supported the *Yes Scotland* campaign as Scottish independence would have been, according to the Scottish CND, ‘the most immediate and effective way of getting rid of Trident’. The Scottish CND Coordinator put it simply: ‘Vote Yes – Rid Scotland of Trident’. This reasoning was mirrored by the then Scottish Government Environment Minister Richard Lochhead in a speech on *independence and the environment* in April 2014:

The power of a written constitution [following on from a Yes vote] is also at the heart of the second green gain of independence – ensuring that an independent Scotland is a nuclear-free nation – free from weapons of mass destruction and no more nuclear power stations. [...] Scotland has [...] been home to one of the largest concentrations of nuclear weapons anywhere in the world. Weapons which continue to be based in Scotland despite majority public opposition and the views of civic society, our churches, trade unions and a majority of Scotland’s MSPs and MPs. With Independence, Scotland will be able to reject nuclear weapons and any proposed new nuclear power stations and we would have the opportunity to write this into our constitution. Scotland could make one of the biggest statements of principle: We will be a safe country, a clean country, a nuclear-free country.

There are, evidently, deliberate frame bridges constructed by various actor groups and spanning across anti-nuclear non-governmental organisations and Scottish Government. These resulting policy stories are diametrically opposed to Westminster policies of a new nuclear energy generation as well as a new arsenal of nuclear weapons. The Scottish policy framing suggests a strong and deliberate overlap of discourses in terms of story-telling, social construction and shared identity. And yet, there are certain aspects that are unique to each actor group and policy frame. The anti-nuclear deterrence/ coercion side stands out in that it collaborates closely with representatives from the STUC and churches in Scotland (as evidenced in Church of Scotland (2006) *Trident: UK nuclear weapons at a crossroad*, as well as the ‘Scotland’s for peace’ and ‘Scottish Clergy against Nuclear Arms’ campaigns) and explores arguments that centre around employment and social wellbeing. For instance, in a joint CND-STUC report on the future of Trident missiles in Scotland, the authors carefully considered the economic and employment costs & benefits if both Faslane and Coulport naval bases were to relocate to England. This collaboration, however, does not divert from the triangular story-telling described above; rather it extends the frames to other actors and their particular priorities and stories. The STUC may not be entirely united on the issue, as recent wrangling between officials suggest. However, large sections are committed to the anti-nuclear cause and maintain close ties with the anti-nuclear policy frames. This *extension* of frames and story-telling adds support (rather than a distraction) to the frame-bridging dynamic and offers an enhanced sense of legitimacy to the anti-nuclear cause in Scotland.

On a final data analysis note, it was interesting to see how the use of language evolved in the story-telling with new terminology emerging to reinforce certain messages and constructed *truths*. This may be unintentional or intentional, depending on authors and origin of the document. In the run-up to the Scottish Referendum, for instance, both scholars (such as Chalmers and Walker 2013) and activists revealed a liking for the abbreviations RUK

(Remaining UK) and rUK (rest of the UK) and although associations with these abbreviations were highly speculative (i.e. in the event, the UK remained intact), the frequent use of this politically laden terminology in both anti-nuclear power and deterrence documents further suggests the notion that anti-nuclear causes and Scottish self-determination are tied together.

Overall, the data gathered suggests that Scottish nuclear policy frames and their actors are connected in terms of language, personnel, shared beliefs and campaigns. The data particularly highlighted the bridging between the stories of anti-nuclear movements and Scottish self-determination, with the latter lying at the core of the Scottish Government's normative ambitions. To a certain extent it could be argued that the Scottish Government pushed for a determinately anti-nuclear policy (and thereby denying Scotland of a nuclear energy future) out of 'us versus them' motivations which may be considered as somewhat populist in nature. To what extent these motivations actually influenced the policy content is not entirely clear. However, to observers such as the Labour MSP interviewed 29/6/2012, the policy stance by the Scottish Government was perceived as an 'us versus them' measure. Certainly the whole nuclear debate in Scotland has to be considered within the wider political dichotomy between pro and anti-independence forces. While these 'us versus them' motivations may have had a role to play in the Scottish policy formulation, it is the more intricate and deeply-rooted triangular stories that determine the Scottish Government's policy. And this triangular story-telling emerged and developed long before the SNP took governmental office in Scotland and conducted the Scottish Referendum in 2014. It is because of these deeply-rooted connections that the following statements by the Scottish Government come as no surprise:

Through the powers of independence we can ensure we build a cleaner, greener and **nuclear-free nation**, and Scotland can fulfil its potential to be a beacon of environmentalism and sustainability.

This Government will **reject any proposals for new nuclear power stations** and will **secure the speediest safe withdrawal of nuclear weapons** in Scotland.

The power of a written constitution is also at the heart of the second green gain of independence – ensuring that an independent Scotland is a **nuclear-free nation – free from weapons of mass destruction and no more nuclear power** stations.

Scotland's Future and the Environment (2014)

Conclusions

The above analysis confirms the research proposition set at the beginning of this project that seemingly separate issues and their policy frames, when bridged through language, personnel and shared stories, can develop a dynamic that not only affect the actors, their identities and relationships themselves, but also their (shared) stories and policy 'realities'. This dynamic effect can transcend well beyond the original and intended remit of each individual issue or policy frame. For those involved in the Scottish dynamic, opposition to anything nuclear is non-negotiable, with the only concession being a temporary extension of lifetimes for the two remaining nuclear power stations in Scotland to 2023 and 2030. While the shut-down date may be a few years away, it is already at this crucial stage that Scottish policy-makers would need to take the steps necessary to commission a new generation of nuclear power stations if nuclear energy is to continue in Scotland. As this is not forthcoming, a nuclear energy future in Scotland is highly unlikely if not impossible.

The Scottish Government's determined policy stance against anything nuclear does not necessarily reflect Scottish public opinion in general. In fact, public opinion poll results have been ambiguous if not contradictory regarding both civil and military nuclear issues, with outcomes depending heavily on the initiators of the surveys as well as the format and type of questions asked.² Similarly, the Scottish Referendum of September 2014 did not bring about the result that the SNP Government was hoping for, with 55% of the electorate voting NO

and 45% voting YES to Scottish independence. While the current Scottish Government cannot claim full and unreserved public support for its anti-nuclear policy (and, indeed, its independence aim), it does nevertheless appear to have a public mandate in decision making: in an Ipsos MORI opinion poll of June 2012, 64% believed that the Scottish Parliament should make decisions on energy policy while 34% chose the UK Parliament and 2% were undecided. Opinion polls aside, as far as actors with vested interests are concerned, there does not appear to be a veto point in the Government's anti-nuclear policy path either. True, pro-nuclear actors regularly use the media to express their condemnation of the Scottish Government's policy. At the same time, the nuclear lobby and its advocates appear to have accepted their non-nuclear fate in Scotland. One indicator for this fate-acceptance is the dwindling of political party conference presence by nuclear energy lobbyists. Having previously attended political party conferences in Scotland, their presence at these conferences is not as 'vociferous as it used to be, in fact pro-nuclear representations are now far and few', according to an SNP MSP (interview, 8/3/2013).

The above analysis suggests that simple explanatory avenues such as political populism and resource availability do not always explain the whole story of environmental or energy policy choices. It is therefore important to consider the storytelling and embeddedness of decision-making in a wider, cultural and historical context. In the case of the Scottish (anti-) nuclear policy, a *frame bridging* between three complementary but separate issues emerged (i.e. civil & military nuclear plus Scottish self-determination) which fed into grassroots movements as well as large sections of the governing political party and its affiliates. The inter-connection between Scottish self-determination and anti-nuclear protest is particularly evident in the SNP, where the comparatively strong links between grassroots membership and leadership have facilitated the adoption of a clear anti-nuclear energy policy. Indeed, this overlap between Scottish self-determination and anti-nuclear sentiments is reflected in individuals

holding important positions in both spheres as well as the expression of shared meanings, stories and ambitions. This bridging lends added strength to the anti-nuclear cause, be it in the civil or military realms, displaying a dynamic that (arguably) cannot be found South of the Border. The Scottish parliamentary elections in May 2016 produced a minority SNP Government and while the result may have a knock-on effect on further Scottish policy-making in general, it is unlikely that the slight change in the balance of power will have a knock-on effect on the nuclear discourse in Scotland. It is expected that the triangular bridging between policy frames will either continue or be further consolidated in the light of UK Government's contrasting pro-nuclear stance. The author estimates that tensions resulting from pressing questions regarding the future of Trident and the future of nuclear energy in the UK will further consolidate and strengthen the above described policy frame-bridges in Scotland.

An Afterthought

While the focus of this study was on the Scottish nuclear energy case, with some comparative references to the rest of the UK, it would be interesting to extend this frame-bridging analysis to other case studies where similar dynamic frame bridges may be observed. For instance, in Germany the civil and military nuclear policy frames have arguably been bridged to great effect, although the context of national and cultural identity is different from that of Scotland and only marginally impacts on the German nuclear policy stance. Other settings, however, do not appear to produce the same bridging dynamic. In Japan, for instance, concerns over long-term energy security (specifically the long-term provision of energy) is forcing a decoupling (or: de-bridging) of civil and military nuclear energy frames at government level, causing a major divide between political elite and public opinion as evidenced in Japan's recent move to re-start the nuclear programme (See

<http://uk.reuters.com/article/2015/09/01/uk-japan-nuclear-restarts-analysis-idUKKCN0R022Y20150901>).

When comparing Scotland with the rest of the UK, it is noticeable how the nuclear energy discourse in England and Wales appears to be isolated from other political debates and therefore does not benefit from the same dynamic and reinforcement as the Scottish discourse. Baker and Stoker (2013) noted that anti-nuclear groups in England and Wales seemed to have taken their eyes off the nuclear ball following a long drawn-out battle on Sizewell B by the late 1990s. It could be argued that their Scottish counterparts have been able to maintain their anti-nuclear momentum by simply attaching the nuclear issue to the issue of Scottish self-determination. At this stage, these observations are speculative and the author would like to invite researchers to pursue these thoughts further.

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References

Baker, K.; Stoker, G. (2013) 'Governance and Nuclear Power: Why Governing is Easier Said than Done', in *Political Studies*, vol. 61, pp.580–598.

Benford, R.D.; Snow, D.A. (2000) 'Framing processes and social movements: an overview and assessment', *Annual Review of Sociology*, vol.26, pp.611-639.

Chalmers, M.; Wallace, W. (2013) 'Will Scotland sink the United Kingdom's Nuclear Deterrent?' in *The Washington Quarterly*, 36: 3, pp. 107-122.

Gamson, W.A. (1992) *Talking Politics*, Cambridge University Press.

Hall, S. (1982) 'The rediscovery of ideology: return to the repressed in media studies', *Culture, Society and the Media*, Gurevitch, M. et al (eds), Methuen, N.Y., pp.56-90.

Heffron, R.J.; Nuttall, W.J. (2014) *Scotland, Nuclear Energy Policy and Independence*, EPRG Working Paper 1407, Cambridge Working Paper in Economics 1457.

Kitschelt, H.P. (1986) 'Political Opportunity Structures and Political Protest: anti-nuclear movements in four democracies', in *British Journal of Political Studies*, vol.16, No.1, pp.57-85.

Jinnah, S. et al (2011) 'Climate Bandwagoning: the impacts of strategic linkages for regime design, maintenance, and death', *Global Environmental Politics* special issue, Vol.11, No.3.

Reber, B.K.; Berger, B.H. (2005) 'Framing analysis of activist rhetoric: How the Sierra Club succeeds or fails at creating salient messages', in *Public Relations Review*, vol.31, No.2, pp.185-195.

Rüdiger, W. (2000) 'Phasing out Nuclear Energy in Germany', in *German Politics*, vol.9, No.3, pp.43-80.

Schön, D.A. and Rein, M. (1994) *Frame Reflection: towards the resolution of intractable policy controversies*, Basic Books.

Schreurs, M.A. (2013) 'Orchestrating a Low-Carbon Energy Revolution without Nuclear: Germany's Response to the Fukushima Nuclear Crisis', in *Theoretical Inquiries in Law*, vol.14, No.1.

Uekoetter, F. (2012) 'Fukushima and the Lessons of History: Remarks on the Past and Future of Nuclear Power' in *Europe after Fukushima: German perspectives on the Future of Nuclear Power*, Rachel Carson Centre, pp.9-31.

Primary Sources:

Scottish Government

Scottish Government (no date) 'FAQs' <http://www.gov.scot/Topics/Business-Industry/Energy/Facts/faqs>

Scottish Government (2007) 'UK Government Consultation On The Future OF Nuclear Power - The Scottish Government Response The Scottish Government's position on nuclear power'

Scottish Government (2009) *Scotland Without Nuclear Weapons Working Group Report - Scottish Government Response*

Scottish Government (2009) 'Climate Change (Scotland) Act 2009', http://www.legislation.gov.uk/asp/2009/12/pdfs/asp_20090012_en.pdf

Scottish Government (2011) '2020 Routemap for Renewable Energy in Scotland'

Scottish Government (2011) 'Scottish Generation Scenarios and Power Flows'

Scottish Government (2012) 'Electricity Generation Policy Statement', <http://www.scotland.gov.uk/Resource/0039/00390216.pdf>

Scottish Government (2013) 'Scotland's response on nuclear power'

Scottish Government (2014) 'Scotland's Future and the Environment'

<http://www.gov.scot/resource/0045/00457321.pdf>

Scottish Government (2015) 'Energy in Scotland 2015'

Scottish Government (2015) Press release 'Nuclear Power',
<http://www.gov.scot/News/Releases/2011/05/31082406>

Scottish Government (2016) 'Energy in Scotland 2016'

Other

Department of Energy and Climate Change (2013) *Digest of UK Energy Statistics: Chapter 6 Renewable Sources of Energy*

House of Commons (2013) *Nuclear Energy Statistics SN/SG 3631*

Scottish Parliament Question Time (2008)

Environment Secretary Richard Lochhead: speech at the Royal Botanic Garden, Edinburgh (30/4/14)

Documents consulted for data analysis:

Faslane Peace Camp

E-Cigarettes are more Dangerous than Nuclear Weapons 30/5/15

Faslane security breached again! 27/5/15

Mass Destruction and Our Safety 23/5/15

The Secret Nuclear Threat 19/5/15

No-one is Illegal 26/4/15

Make Bairns, not Bombs 19/4/15

Support your local Peace Camp 19/4/15

Come to court and offer support — UPDATED 23/9/13

Burghfield Disarmament Camp — Report 19/9/13

Faslane at Freshers' Fairs — Foties 19/9/13

Faslane film by Camcorder Guerillas screened at Holyrood 18/9/13

Radio Scotland Interview – Tomorrow 8 am 27/7/13

Faslane Peace Camp: New Strawbale Visitors Centre & Communal Space 21/7/13

THE PHOENIX HAS RISEN! 2/6/13

Friends of the Earth Scotland

<http://www.foe-scotland.org.uk/nuclearfree-scotland>

Act now to make Scotland nuclear free

<http://www.foe-scotland.org.uk/node/1788>

HMS Vulcan nuclear reactor leak - the truth must out 09 March 2014

<http://www.foe-scotland.org.uk/news110611>

Three months since beginning-of-the-end for nuclear power 11 June 2011

<http://www.foe-scotland.org.uk/environment-climate-protection-promised-independent-Scotland>

Environment and climate protection promised for independent Scotland 09 August 2014

<http://www.foe-scotland.org.uk/node/1800>

Proposals to remove MOD immunity welcomed 11 March 2014

DTI consultation: Policy framework for new nuclear build (July 2006) - A response from Friends of the Earth Scotland 30 October 2006

OPTIONS FOR COPING WITH HIGH RENEWABLES PENETRATION IN SCOTLAND 2010

Scottish Environment LINK

LINK Climate Change Action Plan 2005

Scottish Environment LINK Concern Paper for the Environmental Advisory Forum For Renewable Energy (EAFRE) 2004

Electricity in Scotland – Transmission and Distribution Briefing Paper - December 2005

Ten Principles for tackling climate change sustainably (no date)

For Better or Worse? Environment Policy in the First Four Years of Scotland's Parliament 2003

Impacts of Unjust Planning Legislation Revealed in New Maps 2006

The Scottish Environment LINK Manifesto - Section 8: Energy 2011

A Strong Coherent Voice The First Two Decades of Scottish Environment Link – and some thoughts for the next two decades 2007

No2NuclearPower

Scotland (no date)

Scottish CND

TRIDENT & JOBS - The case for a Scottish Defence Diversification Agency 2015

DISARMING TRIDENT - A practical guide to de-activating and dismantling the Scottish-based Trident nuclear weapon system 2012

If Britain fired Trident - The humanitarian consequences of a nuclear attack by a Trident submarine on Moscow 2013

NATO IS THE BIGGEST THREAT TO PEACE 2015

No Place for Trident. Scottish Independence and nuclear disarmament (no date)

Trident and Scottish independence Scottish Campaign for Nuclear Disarmament (no date)

Unacceptable Damage Damage criteria in British nuclear planning 2013

SNP

<http://www.snp.org/media-centre/news/2012/sep/snp-welcome-japanese-move-nuclear>

SNP welcome Japanese move on nuclear

<http://www.snp.org/media-centre/news/2012/jul/30-fires-3-years-prompt-nuclear-safety-concerns>

30 fires in 3 years prompt nuclear safety concerns

<http://www.snp.org/media-centre/news/2012/oct/westminster-nuclear-plans-meltdown>

Westminster nuclear plans in meltdown

<http://www.snp.org/media-centre/news/2015/sep/labour-quietly-rubberstamps-trident-renewal>

Labour quietly rubberstamps Trident renewal

<http://www.snp.org/media-centre/news/2015/sep/welcome-nuclear-disarmament-debate>

Welcome for nuclear disarmament debate

SNP CND

<http://www.snpcnd.org/weapons.php>

Nuclear weapons

<http://www.snpcnd.org/power.php>

Nuclear power

Working Group on Scotland Without Nuclear Weapons

Overview 2008

WORKING GROUP ON SCOTLAND WITHOUT NUCLEAR WEAPONS - REPORT TO SCOTTISH MINISTERS AUGUST 2009

The Media:

BBC (16/2/2016) 'Torness nuclear plant has operating life extended by EDF' <http://www.bbc.co.uk/news/uk-scotland-35581272>

Evening Express (26/10/15) 'Unions set for Trident battle at Scottish Labour Conference'

Reuters (1/9/15) 'Japan Nuclear Restarts' <http://uk.reuters.com/article/2015/09/01/uk-japan-nuclear-restarts-analysis-idUKKCN0R022Y20150901>

The Glasgow Herald (2002) 'Blair forced to step into nuclear power row'

The Herald (10/4/14), Alex Gallagher - Letter: *frustration over Hunterston B*

The Scotsman (14/8/13) Martin Livermore – letter to the editor.

The Telegraph (29/10/15) 'Engineers urge SNP to drop 'irrational' energy policy'

The Times (3/11/15) ‘Trade Unions split over Trident vote’

Research Correspondence:

Labour MSP, interview, 29/6/2012

SNP MSP, interview, 8/3/2013

Scottish Government Energy Markets Unit, written response to author’s online survey, May 2012

Scottish CND Vice-Chair, written correspondence, 3/7/2014.

Opinion Polls:

Daily Record (April 2016) *Do you support or oppose the renewal of Trident?*

<http://whatscotlandthinks.org/questions/do-you-support-or-oppose-the-renewal-of-trident#table>

Ipsos mori opinion poll (14 June 2012) *Scottish Public Attitudes & Opinion Monitor - Wave 12*

<https://www.ipsos-mori.com/Assets/Docs/Scotland/ipsos-mori-scotland-future-of-scotland-tables-june-2012.pdf>

Lord Ashcroft (May 2013) *Trident and Scotland Poll* <http://lordashcrofthpolls.com/wp-content/uploads/2013/05/Trident-Poll-Summary.pdf>

WMD Awareness opinion poll (April 2014) <http://www.wmdawareness.org.uk/young-people-are-the-future-let-us-have-a-say-in-it/>

¹ Particularly in the hydro and wind categories, Scotland has an advantage over the rest of the UK. See, for instance, ‘Chapter 6 Renewable Sources of Energy’, *DUKES 2013*, DECC

² Lord Ashcroft’s *Trident and Scotland Poll* of May 2013 presents a markedly different picture on public opinion in Scotland (34% in favour of Trident replacement, 31% in favour of retaining nuclear weapons, 20% in favour of giving up nuclear weapons, don’t know 16%) than a *WMD Awareness* opinion poll of April 2014 (only 19% of 18-35 year olds in favour of Trident renewal) and a Daily Record opinion poll of April 2016 (32% support Trident renewal, 45% oppose, 23% don’t know). These and other opinion polls are heavily influenced by the wording, recruitment and the context of the questions.